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**“Gone But Not Forgotten: Digitizing the 177 Year-Old  
Legacy of New York City’s Green-Wood Cemetery”**

**A Planning Grant**

**from the**

**National Endowment for the Humanities**

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**Project Director’s Report**

**Anthony M. Cucchiara, Archivist**

**Green-Wood Cemetery**

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## Historical Background

On December 15, 1838, eight civic minded individuals, from the newly formed city of Brooklyn (1834), ferried across the East River to the law office of Stephen C. Williams, located at 15 Wall Street. These leaders, members of The Green-Wood Cemetery Company, gathered to nominate and elect officers and to create an organizational structure. They called upon Alonzo G. Hammond to chair the nascent group and appointed Henry Evelyn Pierrepont as the recording secretary. In Pierrepont's hand, the first working minutes of the cemetery's directors were recorded for posterity. This manuscript, less than two pages long, gives insight into the thinking of the directors and marks the beginning of Green-Wood Cemetery's institutional archives.

Today, the Green-Wood archives and file rooms contain 179 years of records revealing the illustrious history of this venerable institution. Typically, an institutional archives contain items such as charters, meeting minutes, deeds, maps, and ledgers. However, at Green-Wood there are many other unique record collections, such as Memorandum files, Burial Order Files, and Chronology Books that were created and used by hundreds of employees over the years to conduct the cemetery's business affairs. Each collection within the archives tells a story. Some tell the story of the individuals whose vision and determination guided and directed the cemetery, while some tell us about the 570,000 individuals interred and their family members and others explain how Green-Wood grew physically in size and beauty. These archival records serve as the institutional memory and answer today's and tomorrow's questions posed by genealogists, researchers, historians, families, and cemetery personnel.

Starting with the very first interment on September 5, 1840, these record groups provide proof of lot ownership, family wishes for the care and maintenance of lots, and related correspondence. The records are replete with family trees, genealogical charts, newspaper clippings, personal notes, monument designs and inscriptions, and other family related information. Moreover, these unique records, used daily, help cemetery staff to address the myriad of questions posed by lot owners and researchers. Not only are these records rich with genealogical and historical information, but they contain a wealth of evidential information.

The largest record group within the archives are the Burial Order Files. These files, arranged numerically by lot number, contain burial authorization records detailing family relationships, family and business correspondence, telegrams, genealogical charts, lot diagrams, sketches, and monument designs, often containing individual and family histories and biographies. Moreover,

these Burial Order Files treat us to a rich mélange of ornate 19<sup>th</sup> and 20<sup>th</sup> century business and personal stationery. The business stationery is of particular interest and value because it provides addresses, descriptions of funeral products and services, monument makers, transporters, funeral directors, and embalmers, illustrating the network of businesses supporting the mission of Green-Wood Cemetery over the decades.

Maintaining an archive of historical and institutional records takes an enormous institutional responsibility and commitment requiring vision and financial resources. Green-Wood has succeeded in achieving this by organizing, describing and preserving its records under the leadership of an archivist (since 2009) who guides and directs a dedicated cadre of volunteers and interns. To bolster its archival holdings and to fully tell the story of the cemetery and the lives and accomplishments of its “permanent residents,” the cemetery, in conjunction with The Green-Wood Historic Fund, began in 1999 building a sizable and significant collection of historical objects, photographs, books, documents and ephemera.

As Green-Wood Cemetery transitions from its core functions to becoming a research, educational and cultural center, our institutional records, archives and historical collections will be increasing in demand by on-site and online researchers, genealogists, historians, sociologists, and numerous others. How do we meet this anticipated demand? How do we provide access, yet ensure the safety and protection of our fragile and embrittled analogue records? How do we address the privacy concerns inherent in the type of records we hold? If our records are digitized, how do we make that information discoverable to the public?

To answer these questions and solicit professional guidance in meeting the challenges that lie ahead, The Green-Wood Historic Fund was awarded a National Endowment for the Humanities planning grant entitled “**Gone But Not Forgotten: Digitizing the 177 Year-Old Legacy of New York City’s Green-Wood Cemetery**” ( see Appendix A). Grant funds enabled the cemetery to hire consultants in both the humanities and digital humanities to address questions, evaluate our holdings and make recommendations for future directions and initiatives. Below are two summary reports that synthesize their comments, observations and findings.

# **Humanities Team**

## **Summary Report of Recommendations**

### **Team Members:**

**Dr. Julie A. Golia, Ph.D. - Brooklyn Historical Society**

**Prof. Thomas Kessner, Ph.D – City University of New York , Graduate School**

**Prof. David Rosner, Ph.D. – Mailman School of Public Health, Columbia University**

**Ms. Lacy Schutz, Executive Director, Shaker Museum, Mount Lebanon, N.Y.**

**Ms. Elizabeth Jeffe, Trustee, Green-Wood Cemetery, Board of Trustees**

Over the course of several months, each member of the Humanities Team had the opportunity to review, examine and analyze many of Green-Wood’s institutional records, archival holdings and materials from its historical collections, including the cemetery’s fine arts holdings.

Each consultant was asked eleven questions (see Appendix B) as they reviewed our holdings. After reviewing their responses, the following themes reflect their insight and thinking about how Green-Wood can utilize its records, promote their use and maximize their research value.

- a.) Historical Role of Green-Wood Cemetery
- b.) The Cemetery Business and Burial Industry
- c.) Mortality Data
- d.) Collections
- e.) Collection Promotion and User Outreach
- f.) Thematic Approaches and Research Facilities

## **Historical Role of Green- Wood Cemetery**

**“... it is interesting that virtually all of the future major cities both in Europe and the United States engaged in this process of cemetery building. It seems that cemeteries played a significant role in marking the importance of the city.”<sup>1</sup>– Prof. David Rosner**

Clearly, Green-Wood Cemetery made significant contributions to the mid -19<sup>th</sup> century rise of New York City and the emerging City of Brooklyn. Our consultants asserted that, the cemetery’s institutional records, founding documents, Burial Orders Files, early maps and historical accounts, land records, publications, trustees’ minutes should be mined to fully document the role played by Green-Wood and its founders. As noted by Humanities Team members, Elizabeth Jeffe and Thomas Kessner, these records can be used to reveal the impact of urban growth on burial practices of the times revealing Brooklyn’s need for “...finding a safe and sanitary resting place for human remains...”<sup>2</sup>

Moreover, the Humanities Team stated that, the cemetery’s array of land transfer records, manuscript maps and land deeds can be gleaned to further understand and study how Green-Wood was formed with the purchase of land from some of the oldest families in Brooklyn and how it grew through the decades. According to Prof. Rosner, our land records offer a new level of specificity because those and other records reveal the design and construction of the cemetery’s infrastructure of roads, drainage systems and water lines and the cemetery’s overall design and topography.<sup>3</sup>

## **The Cemetery Business and Burial Industry**

**“Certainly, the rural cemetery movement was more than cultural history alone.”<sup>4</sup> – Prof. David Rosner**

The consultants were given access to Burial Order Files, Memo Files and Architectural Drawings records which contain the day to day operations of the cemetery and creation of its numerous mausoleums. After reviewing these records, the consultants identified new and potential avenues of research related to the growth of Green-Wood. While the cemetery records can be

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<sup>1</sup> Rosner, David. Humanities Team Reports. Appendix D [p.57]

<sup>2</sup> Jeffe, Elizabeth. Humanities Team Reports. Appendix D [p.63]

<sup>3</sup> Rosner, David. Humanities Team Reports. Appendix D [p.58]

<sup>4</sup> Ibid.[p.58]

used in a larger and broader study of the social, cultural, historical, and commercial aspects of cemeteries, Green-Wood's institutional records also reveal its unique business practices from the 19<sup>th</sup> century to the present day, also worthy of closer study. Elizabeth Jeffe and Julie Golia, noted that these archival holdings can be "instructive" in understanding Green-Wood's detailed and complex record keeping, organizational and employee structure, how it functioned, thrived, and expanded over the centuries.

As noted by Prof. Rosner, Green-Wood was part of the "commercialization of death"<sup>5</sup> as the business records, particularly the Burial Order Files, reflect the buying and selling of lots that spawned a range of businesses including stone carvers, transport services, florists, undertakers, embalmers, and funeral parlors and homes, all essential and woven into the operations of the cemetery. In addition, Prof. Kessner pointed out that the Burial Order Files and the sub-set cache of business and commercial stationery can be used by future researchers to examine the relationship of the businesses associated with Green-Wood and how it changed over time. Another layer of research value contained within the records, as identified by Prof. Kessner is what he calls, the "fetishization of death"<sup>6</sup> with the design and construction of statues, memorials and mausoleums to honor the dead, bringing a "conspicuousness into the burial and memorialization business..."<sup>7</sup> worthy of further historical investigation.

## **Mortality Data**

**"The Chronology Books offer a vast, possibly unprecedented amount of data about every person interred at Green-Wood Cemetery, which.....could be leveraged in countless ways." <sup>8</sup>- Julie Golia**

Starting with the first burial in 1840 and continuing through 1937, the Chronology Books maintained by the cemetery record keepers on a daily basis for each interment by recording the burial date, name of the deceased, birth and death dates, age by years, months, days, place of

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<sup>5</sup> Rosner, David. Humanities Team Reports. Appendix D [p.58]

<sup>6</sup> Kessner, Thomas. Humanities Team Reports. Appendix D [p.48]

<sup>7</sup> Ibid.[p.48]

<sup>8</sup> Golia, Julie. Humanities Team reports. Appendix D [p.69]

birth (nativity), street and house number of residences, cause of death, undertaker, and occasional notations and lot/grave diagrams.

According to Julie Golia, the Chronology Books, considered “...artifacts of 19<sup>th</sup> century cemetery record keeping,”<sup>9</sup> capture a wealth of data that offers scholars and researchers from many disciplines a wellspring of vital information to analyze and study. Given the informational and evidential richness of these sixty volumes, this set of records documents the burials of 480,180 people over 97 years, offering a plethora of demographic data. If digitized, these records would then need to be transcribed and entered into a database as recommended by our consultants. It would then enable historical demographers, public health historians, and social scientists, to conduct in depth studies and historical correlations. The mining of this data could result in the mapping and charting of diseases by neighborhoods as well as broader sections of Brooklyn and New York City. Julie Golia concluded that this type of study can lead to a “...new analysis on the nature of disease...”<sup>10</sup> Public health historian, Prof. David Rosner strongly concurs with Golia, stating that the wealth of data captured in these volumes “...allows for a field-day of questions and historical issues...”<sup>11</sup> as it relates to the role of industrialization leading to new causes of death in the urban environment. Prof. Rosner believes the Chronology Books offer a “...complete and continuous stream of data...”<sup>12</sup> crucial for demographic and public health studies of the 19<sup>th</sup> and the first third of the 20<sup>th</sup> century. Prof. Thomas Kessner agrees that this unique set of records offers a myriad of other research possibilities including exploring death and plague; studies of age, death and disease; and death rate among age groups, occupations, ethnicity and communities.

## Collections

### **“Acquisitiveness has overrun judgement in many cases”<sup>12</sup> – Lacy Schutz**

Since 1999, The Green-Wood Historic Fund, the fundraising and programming affiliate of the cemetery has built historical collections related to the cemetery’s history, those associated with its founding, and most importantly, documenting the role and contributions of its 570,000 “permanent residents.” The collection of ~ 8,000 historic objects, furnishings, object d’art, photographs, documents, letters, ephemera, and a fine arts collection of over 350 paintings, drawings, sketches and sculptures illustrate the cemetery’s story. These historical collections are

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<sup>9</sup> Golia, Julie. Humanities Team Reports. Appendix D [p.70]

<sup>10</sup> Ibid. [p.70]

<sup>11</sup> Rosner, David. Humanities Team Reports. Appendix D [p.59]

<sup>12</sup> Schutz, Lacy. Humanities Team Reports. Appendix D [p.62]

curated by the cemetery historian, Jeff Richman and the fine arts collection is curated by cemetery president, Richard Moylan with the assistance of a fine arts specialist.

In her evaluation, Lacy Schutz identified several critical issues that Green-Wood should consider as it continues to build these holdings. Due to The Green-Wood Historic Fund's lack of a formalized collecting policy, collection guidelines or an established selection criteria, the collections reflect both "scope creep," going beyond the subject bounds of the institution and resulted in "over-represented" subject areas within the holdings.<sup>13</sup> A lack of a collection policy has led to the acquisition of many duplicates or similar items with some in poor condition, thereby limiting their use to the institution. Her recommendations strongly calls for three very important steps to be taken to strengthen the historical collections, the creation of 1.) a **"collections committee"** to evaluate and review potential purchases and donations rather than leaving this important task to two individuals; 2.) a well-crafted **"collecting policy"** that "...defines the intellectual and mission-driven scope of the collection and collecting activities;" and 3.) a schedule to conduct periodic review of the collections to deaccession those items deemed no longer useful in illustrating the institution's history.<sup>14</sup>

## **Collection Promotion and User Outreach**

**"If we [Green-Wood Cemetery] establish ourselves at the forefront of archival excellence among cemeteries – becoming the go to institution – we will have achieved yet a new level of excellence for ourselves as a historical and cultural leader."** <sup>15</sup> – Elizabeth Jeffe, Trustee, Green-Wood Cemetery

As the cemetery transitions from its primary function to becoming a cultural and historical research center, it is the depth and richness of its archival holdings and historical collections that will propel it forward and fuel the educational programming, historical exhibitions and research initiatives. Unfortunately, our records are not widely known. Thus far, our "Green-ealogy" service, a fee based genealogical service launched in 2013; a series of historical exhibitions; a Civil War Veterans project; and host of historical publications have generated

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<sup>13</sup> Schutz, Lacy. Humanities Team Reports. Appendix D [p.62]

<sup>14</sup> Ibid. [pp.62-63]

<sup>15</sup> Jeffe, Elizabeth. Humanities Team Reports. Appendix D [p.68]

awareness of collections among only a select group of researchers and academics, but not to a wider audience of users and the general public.

Referring to the institution's archives, Golia stated "it should be clear that Green-Wood has archives; that's not something that I think most researchers will realize."<sup>16</sup> The consultants are unanimous in their recommendations that we must make use of every means possible to generate awareness and promote our materials by implementing the following procedures:

- Publish our collection finding aids in Archon or Archival Space. Both are archival management databases, accessible via the Internet where researchers will learn about the content and arrangement of our records. Archon is currently in use and Archives Space is yet to be adopted.
- Publish bibliographic information about Green-Wood's archives and library on widely used national databases such as Worldcat.org, Digital Public Library of America as well as other public and academic websites.
- Link Green-Wood's finding aids to websites containing in depth biographical manuscript holdings related to important historical personages in Green-Wood's story, such as the Henry E. Pierrepont papers at the Brooklyn Historical Society and the David Bates Douglass papers at the Williams L. Clemens Library at the University of Michigan.
- All digital records and collections generated by Green-Wood should be made freely accessible and not impeded by a paywall or watermarks restricting or preventing use and duplication. Researchers should be strongly encouraged to peruse records in person or online.
- Green-Wood should embark on a series of online exhibitions to promote and encourage use of the collections.

To reach the scholarly and academic communities, Julie Golia and Prof. Thomas Kessner recommend we contact and send announcements about archival and collection holdings to varied professional organizations such as the American History Association, Urban History Association, and Organization of American Historians. Green-Wood should also make a concerted effort to reach out to undergraduate and graduate faculty, particularly those teaching at the masters and doctoral level, informing them of the availability and research value of our materials.

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<sup>16</sup> Golia, Julie. Humanities Team Reports. Appendix D [p.71]



Additionally, Elizabeth Jeffe recommends that the cemetery initiate an oral history project to capture recollections of those associated with the cemetery, local and community residents as well as family members of those buried at Green-Wood. Also, the cemetery should create and publicize a “speaker’s bureau” to promote the collections to academics in history and encourage visitation to the cemetery’s planned gallery and research center.<sup>17</sup>

## **Thematic Approaches and Research Facilities**

**“...the story they [Green-Wood] can tell is hiding in storage.”<sup>18</sup> – Prof. Thomas Kessner**

Prof. Kessner stated that, Green-Wood has “...evolved willy-nilly from a cemetery to a semi-public space...and now it is time for taking a more comprehensive approach.” The list of research trends and current subjects of interest is long and can easily be supported with the cemetery’s holdings and covers a multitude of disciplines ranging from cultural to sociological studies, urban life, public health, landscape architecture, to business and environment. He recommends developing the following themes to promote the collections and for exhibition<sup>19</sup>:

- The People of Brooklyn
- Ritual in Life and Death; the Sacralization of Death, Wakes and Celebrations of Life, Earnest Mourning, Gravesite Eulogies, Tombstones and Monuments.
- Public health, Healing, Medicine, Hospitals
- Transitions: Passing on Wealth, Beliefs, Rituals, Artifacts, Death Practices from Generation to Generation
- Aspects of the Brooklyn economy focusing on the occupations, professions, businesses run by Green-Wood’s residents; Brooklyn’s business history – farms, sugar monopoly, home production, etc.
- Political figures interred tell the story of the city’s politics and Brooklyn’s ultimate consolidation into Greater New York City.
- Sports and Brooklyn
- Personal wills to study family dynamics; changing will forms and styles; patterns of distribution; and the different treatment of sons and daughters.

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<sup>17</sup> Jeffe, Elizabeth. Humanities Report. Appendix D [p.67]

<sup>18</sup> Kessner, Thomas, Humanities Report. Appendix D [p.54]

<sup>19</sup> Kessner, Thomas. Humanities Report. Appendix D [pp.54-55]

While Green-Wood's archival and historical collections and files are becoming more organized, described and accessible, the consultants noted the importance to accommodate on-site researchers to conduct their research. Presently, assisting researchers is problematic because there is very limited controlled work space for staff to assist researchers. Prof. Kessner advises that suitable space be identified soon to encourage researchers to come to the cemetery and have staff available to assist and guide researchers. Additionally, Green-Wood should provide finding aids to its collections and create subject guides for selected research topics.

# Digital Humanities Team

## Summary of Recommendations

### Members:

**Prof. Anthony Cocciolo, Ed. D – School of Information, Pratt Institute**

**Ms. Zannah Marsh – Turbulence, Mozilla Foundation**

**Ms. Julie May - Managing Director of Library and Archives, Brooklyn Historical Society**

Our NEH planning grant has also afforded us the opportunity to assemble a team of Digital Humanities consultants. They were asked to recommend the best approaches for us to digitize and to widely disseminate the important records contained within our holdings. A series of questions had been posed to this team, revolving around the following critical issues: 1.) developing a **digitization plan**; 2.) Identifying **methods and approaches** to digitize records including crowdsourcing, computer program platforms and the metadata necessary to make these records searchable; 3.) establishing a **privacy policy**; and 4.) how to provide greater **accessibility** to more users and whether records should be made available solely online and/or in person at the cemetery.

## Digitization Planning

Given the vast quantity of Green-Wood's records, identifying which records that should be digitized first, is a difficult task. Our consultants were nearly unanimous in recommending that we consider a range of options before launching a digitization program. Options include the following<sup>20</sup>:

- a) **Full digitization** - Scan and transcribe all record sets by a vendor would be extremely expensive;

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<sup>20</sup> Cocciolo, Anthony. Digital Humanities Team Reports. Appendix D [ pp.4-5]

b) **Curate the digitization of records**- Select the most important institutional records and those designated by the Humanities Team, such as the Chronology Books and/or the Burial Order Files to be digitized.

c) **Digitization on demand** - Digitize materials as they are requested by researchers and link them to finding aids. Also digitize records that are used daily, are fragile, damaged or physically at risk, such as the Chronology Books, Lot books, Heirship Books, and Burial Order Files.

## **Methods and Approaches**

Digitization involves more than scanning and storage of digital assets. In order to make records searchable, particularly hand written records, they need to be transcribed and metadata created for each record to maximize their research value. This is a time consuming and costly endeavor for Green-Wood. Consultants have offered various cost effective ways to access platforms, add metadata schema, and make records searchable.

Given the numerous cemetery records that could be digitized, all eight consultants believe that it is the highest priority to digitize the **Chronology Books, 1840-1937**. This 60 volume set contains handwritten entries providing an enormous amount of information about each of the 480,180 burials recorded. This unique set of records gives a plethora of information about each person buried: their place of birth, age in years, months and days, the house and street address where they lived, cause of death, lot number, and undertaker who presided over their burial. All consultants concurred that the unique informational value of this record set, heavy use by staff, volunteers and outside researchers, and its fragile condition warrants immediate digitization.

Once volumes of this set are scanned, either in-house or by an outside vendor, it is essential to transcribe each line of data and enter into a metadata schema in order to make these records searchable.

Our digital consultants recommended some ways for us to consider transcribing our records to maximize their research value to users, such as the following:

## Crowdsourcing Digitized Records

The vast majority of Green-Wood's records are handwritten which prevents the use of Optical Character Recognition (OCR) software. To overcome this obstacle, consultants were unanimous in recommending "crowdsourcing" to transcribe written records. They described in detail what other institutions have done to surmount the cost of having an outside vendor conduct this phase of a digitization project. Zannah Marsh described crowdsourcing as a way to engage the public by creating "... small micro-tasks and distribute them among many users,"<sup>21</sup> where online volunteers contribute their time to transcribe written content into searchable data. Prof.

Cocciolo suggested using affordable software tools, such as *From the Page*

<http://fromthepage.com/> and *Scripto* <http://scripto.org/> to accomplish this task.<sup>22</sup>

Other institutions, such as the Smithsonian Museum's Transcription Center <https://transcription.si.edu/> have had enormous success in transcribing their manuscript holdings, where their "digital volunteers" have transcribed upwards of 300,000 pages of field notes, diaries, ledgers, logbooks, and other manuscript materials since the Center's opening in July 2013. Other institutions have engaged the general public in similar endeavors including the New York Public Library's, NYPL Lab (<https://www.nypl.org/collections/labs>) and Zooniverse (<https://www.zooniverse.org/>) creating digital resources for both the research community and general public.<sup>23</sup> These projects demonstrate ways for Green-Wood to inexpensively accomplish record transcription.

The Findagrave.com platform is another good model for the cemetery to follow. It is a variation of the crowdsourcing approach. The Findagrave.com concept builds a community of active content contributors rather than transcribers, similar to the content provided by volunteer researchers and writers for Wikipedia.com. Zannah Marsh points out ..." Green-Wood might look to this example in considering ways to expand its community of active, enthusiastic members."<sup>24</sup> For example, creating a "photo challenge" event where visitors are encouraged to photograph a certain area of the cemetery, or search for a certain kind of burial (much like the Civil War Veteran Research Project), could generate excitement and increase both attendance and use of archival records.

## Open Data and Data Visualization

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<sup>21</sup> Marsh, Zannah. Digital Humanities Team Reports. Appendix D [p.40]

<sup>22</sup> Cocciolo, Anthony. Digital Humanities Team Reports. Appendix D [p.5]

<sup>23</sup> Marsh, Zannah. Digital Humanities Reports. Appendix D [pp.39-42]

<sup>24</sup> Ibid. [p.41]

Given the depth of Green-Wood's records and holdings, all consultants agreed that metadata created thus far and in the future, should be shared among researchers, data analysts, application designers, and metadata platforms to broaden awareness of our holdings. Utilizing Creative Commons Licenses promotes the sharing of "non-proprietary file formats"; and Github could be used as a quick method of releasing data.

As stated by Marsh....."Institutions should be thoughtful about opening data, and abide by any privacy restrictions. But sharing data and metadata enables scholars, students, software developers, artists, and other enthusiasts to do analysis, visualization, and other exciting, creative work that an institution may not have the time or resources to carry out on its own."<sup>25</sup>

## **Digital Platforms**

Currently, the cemetery employs the following record databases and platforms:

Burial Inquiry Database

Office Administration System

Integrated Cemetery Enterprise System (ICES)

ARCHON – Archival management system

Past Perfect Museum Management Software

Designed by different software firms, these databases are not interoperable and therefore only provide access to individual silos of information and records with limited accessibility to all staff. Consultants primarily focused their attention on three databases, two of which, ARCHON and Past Perfect, offer a public interface while the third, ICES, has the potential for public access.

ICES is a powerful tool that provides access to a full range of content formats, both textual and non-textual materials, associated with each interment. Currently, this database assists a few staff members in locating lot book records and affidavit files information pertaining to interments, but hasn't maximized its full potential to manage other record sets nor opening this database for public access.

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<sup>25</sup> Marsh, Zannah. Digital Humanities Reports. Appendix D [p.39]

Despite its potential, “...a compelling option...” as noted by Prof. Cocciolo, our digital consultants expressed concern that ICES is a propriety platform, developed by one individual whereas other databases, such as ARCHON, are open source platforms available to improvements by a community of developers. Furthermore, as ICES is currently configured, the data contained is “locked” into the ICES platform and can’t be exported nor metadata shared with other programs and the public. If possible, consultants recommend that the ICES program open its data files so they can be exported to standard output such as EAD, xml or csv formats, so records can be usable and interchangeable with other platforms, making them findable, “...using tools that researchers normally use...,” such as Google.<sup>26</sup>

With regard to the Burial Inquiry Database and Office Administration System, the consultants were unanimous in recommending that Green-Wood investigate merging or making these databases interoperable. The last two programs, ARCHON and Past Perfect are utilized solely to manage the cemetery archives and historical collections of photographs, documents, objects and fine art, respectively.

ARCHON, an open source program developed by the University of Illinois, provides a unified platform to record descriptive information about archival holdings and digitized assets. It provides a fully functional public website making collections searchable by researchers. Supported by a community of developers and users until 2014 when it and its digital counterpart, Archivist’s Toolkit were merged into ArchivesSpace to provide an improved administrative structure and technical support.

Green-Wood has used ARCHON since 2012 to manage its archival holdings and has entered upwards of 100 record groups. To date, used solely as an internal database to search archival holdings, the cemetery has not made ARCHON available as a public website. Consultants strongly recommend making this database available via the Internet but more importantly begin to migrate ARCHON to ArchivesSpace out of concern that data may be lost or damaged because ARCHON is no longer supported.

It’s recommended that the Green-Wood archives utilize the migration tools provided by Archives Space (AS) and the members of the AS community, who have migrated from ARCHON avoiding the mistakes and problems encountered by the early adopters of Archives Space. If the cemetery opts not to migrate on its own, there are two firms in the field that are Archives Space registered service providers and are recommended to assist us in this endeavor. The firms are:

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<sup>26</sup> Cocciolo, Anthony. Digital Humanities Team Reports. Appendix D [p.6]

**Lyrasis** – which was involved in the development of Archives Space. Lyrasis is highly recommended to host our site and handle the migration of our records to the new system. Their sliding scale fee is based upon the number of records proceeded and hosted.<sup>27</sup>

**Atlas Systems** - a software firm and part of the Archives Space community. It offers similar services of hosting and migration at a medium price range.<sup>28</sup>

Past Perfect Museum Management Software is a proprietary platform designed to manage collections of images, documents, objects, fine arts, and ephemera. More importantly, it features an online component to provide greater public access and enables all descriptive metadata to be shared across a variety of platforms. To date, the Past Perfect database adopted by Green-Wood is used only internally to describe and locate our holdings but hasn't opted to offer wider accessibility as is recommended by the consultants.

## **Privacy Policy**

All three consultants examined and reviewed many of the cemetery's records and it became immediately evident to them that these records contain vast quantities of personal and private information. Numerous record groups, particularly the Burial Order Files are filled with personal and family correspondence, burial requests, monument designs, and other related materials of the deceased. While essential to conduct the day to day business of the cemetery since its beginning, these records are now a treasure trove of genealogical and historical information. Once used primarily for internal purposes, these holding are eagerly sought by researchers, genealogists, historians and a myriad of other researchers.

As the cemetery transitions to a cultural and educational center with the construction of a research room, art gallery and museum, and offers such research services as "Green-ealogy," it's imperative that we adhere to professional and legal guidelines governing the use and duplication of these unique original source materials. This is particularly important as we begin to digitize and consider providing public online access to our records.

As Green-Wood structures its digitization plan to scan and disseminate records, it must adhere to the United States Copyright Law as it applies to published and unpublished materials within its holdings. Currently, unpublished documents and materials enter into the public domain 70

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<sup>27</sup> May, Julie. Digital Humanities Team Reports. Appendix D [p.17]

<sup>28</sup> Ibid, [p.16]



years after the life of their creator. Therefore, Green-Wood's unpublished records created before 1947 are in the public domain, thereby eliminating copyright restrictions and minimizing our risk of violating privacy restrictions.

Consultants also caution us that record sets, especially the Burial Order Files, as they are used and added to daily, may contain restricted post 1947 materials. These records must be segregated from earlier materials, as this set of records and other similar sets are digitized.

## **Accessibility of Records and Collections**

The present day mobile and digital environment allows libraries, archives, museums, and historical institutions to share their historical records and material content worldwide. Researchers are no longer bound by time and distance nor are libraries and archives. Historical institutions can now unlock and easily share vast amounts of information that heretofore were only accessible within the confines of their facilities.

According to Zannah Marsh, as Green-Wood stands on the precipice of opening its archival holdings, institutional records, and historical collections to serious researchers and scholars, it should be mindful of "...a far larger, public, non-specialist audience..." who might want access to our collections. Green-Wood should engage both the serious and casual user of our materials, and not fear that digital access will inhibit the researcher from visiting in person. Often times, an engaging online experience will prompt an off-site user to become on-site user.

Marsh recommends that as we design and build websites to present our collections, through what she calls, a "generous interface," enabling us to show the depth, breath and richness of our materials. This would allow for "...interest based exploration that could generate excitement about the collections and prompt an on-site visit..." She goes on to state, "for most visitors, the experience of a unique, authentic, historical objects, documents or artifact is powerful, and more evocative and memorable than a written description."<sup>29</sup>

Lastly, all consultants strongly recommend that finding aids in Archon and digitized portions of Green-Wood's historical collections in the Past Perfect database should be made available by activating the online feature of both platforms. Additionally, those sets of records already

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<sup>29</sup> Marsh, Zannah. Digital Humanities Team Reports. Appendix D [p.36]

digitized, such as the Surveyor's Notebooks, Architectural Drawing files, and the Board of Trustees Minutes should be made available online.

## **Consultant's Recommendation Highlights**

### **Prof. Anthony Cocciolo**

- \* Engage in a series of pilots to digitize records, rather than attempt to undertake a massive and very expensive digitization of all records. Proposed next steps would include:

- \* Make existing finding aids available to the public.

- \* Prepare records that have already been digitized and make available to the public, such as the Surveyor's Notebooks.

- \* Make complete open metadata available to the public, such as lists of people buried at the cemetery, so that this information can be discovered via search interfaces like Google.

- \* Engage in a curated digitization project of the Burial Order Files and make digitized information available to the public.

- \* Engage in digitization of Chronology Books. Index books using outsourced indexers or engage in crowdsourcing. Make digitized information available to the public.

- \* Make select portions of the object database available to the public via the Past Perfect online module.

- \* Roll-out an on-demand digitization program. Link digitized records into finding aids as they are produced.

### **Zannah Marsh**

- \* Carry out a user research program to gain a deeper understanding of what potential non-specialist users want from a digital collection, and what their motivations might be in using the collection.

- \* Consider an "image-first" web-based interface for the collection that enables exploration as well as search; feature the collection front-and-center on the Green-Wood web page.

- \* Consider digitizing highlights of the collection, with a focus on stories and charismatic artifacts, artworks, documents; link these to burial search results.
- \* Consider creating a Zooniverse project for transcriptions of scans of the Chronology Books.
- \* Consider a release of collection metadata under a Creative Commons license, and invite research, software development, and creative communities to use it.

## **Julie May**

- Transcribe the information from the Chronology Books, having the most comprehensive data, into a database; 2. Send Chronology Books for digitization; 3. After digitization, stabilize the physical materials for long-term storage; 4. Enter all new additions to entries in each book directly into the database; entries for other books not yet digested should still be made by hand in the book itself.
- Green-Wood staff should make every effort to export the data in ICES so that it may be used in combination with another platform, or so that ICES may be replaced with something more public-facing.
- Green-Wood could export descriptive metadata to the Digital Public Library of America (DPLA) or another aggregator, thereby expanding the reach of the collections to a larger audience.
- Green-Wood has not yet taken advantage of the publishing module of the program to make its finding aids accessible to outside researchers. If GWC's goal is to make its collections available to researchers, then finding aids must be available and searchable online. The best method is to publish its finding aids from Archon or to create and publish PDFs of its finding aids.
- GWC must migrate from Archon to ArchivesSpace.
- The overlap between the GWC and other repositories in New York City offers potential collaboration that could be beneficial, cost-saving, and time-saving. For instance, GWC could join a catalog collective such as what is offered by NYU who hosts MARC and EAD finding aid records to their academic audience of researchers.

- Digitization is costly and will not mitigate the need to hand-key information into a searchable database. Therefore, every opportunity to harvest any data already entered into an electronic database, regardless of its accuracy, should be taken.

## **Appendices**

### **Appendix A**

## **Green-Wood Historic Fund**

### **2015 Foundations Proposal to the National Endowment for the Humanities**

#### **Humanities Collections and Reference Resources**

#### **Gone But Not Forgotten: Digitizing the 177 Year-Old Legacy of New York City's Green-Wood Cemetery**

##### **Significance of Project**

Green-Wood Cemetery is internationally recognized as one of the most beautiful and historic cemeteries in the world. Established in 1838, it is one of only a handful of America's cemetery's that have been honored as a National Historic Landmark and was recently rated by CNN as one of the top ten most scenic cemeteries in the world, alongside the ranks of Pere-Lachaise in Paris, the Old Jewish Cemetery in Prague, and the Mount of Olives in Jerusalem. As the permanent residence of over 570,000 individuals, GW's magnificent grounds, grand architecture and world-class statuary have made it a destination for national and international tourists, New Yorkers and local Brooklynites.

However, because death (and taxes) is a certainty, the 478-acre cemetery will soon run out of room for burials. Consequently, in 1999 Green-Wood's leadership created a 501c3 organization, Green-Wood Historic Fund (GWHF), to expand the cemetery's scope of activities to include cultural and education programs. Walking and trolley tours; after dark theater; dance performances; public programs; the Collection – an assortment of objects, paintings, sculpture, documents and ephemera related to Green-Wood's permanent residents and its history; and a genealogy program (entitled "Green-ealogy") are just some of the programs the GWHF has successfully launched.

GWHF has determined that the next most critical undertaking is the organization and digitization of Green-Wood's vast archive of institutional records. Green-Wood's institutional archives, some of which date back even earlier than the cemetery's founding, comprise an immense collection of meticulous records, all connected to those interred in the cemetery. They relate to the burials of over half a million individuals, yet these records have been seen only by a handful of cemetery officials. Significantly, these individuals lived in either New York City or Brooklyn – two cities whose populations experienced explosive growth in the 19<sup>th</sup> century – during which New York City established itself as the largest, most prosperous and most industrious city in the nation. Combined with the items in the collections (more than 7,000 now) no other cemetery in America has holdings to rival Green-Wood's. GWHF's goal is to make these records accessible to scholars in the humanities field and to the general public.

This project will be the first time that Green-Wood's holdings will be evaluated by experts in digital technology and members of the academic community. From Green-Wood's own experience in opening its archives to researchers, from consultations with scholars and from discussions with colleagues at other historic cemeteries, GWHF is certain that new scholarship opportunities will arise for the fields of sociology, public health history, urban history, American studies and more.

### *Organization Background*

Founded in 1838, Green-Wood was one of the first rural cemeteries in America; its 478 acres are a remarkable survivor of the 19<sup>th</sup> century and comprise one of the oldest landscapes in New York City. By the 1860s, Green-Wood had earned an international reputation for its magnificent beauty and established itself as the prestigious place to be buried, attracting 500,000 visitors a year, second only to Niagara Falls as the nation's greatest tourist attraction. Crowds flocked to Green-Wood to enjoy Nature, history, and sculpture. Located in Sunset Park, Brooklyn, the cemetery encompasses one of the country's largest outdoor collections of 19<sup>th</sup> and 20<sup>th</sup> century statuary and mausoleums. The property is a peaceful oasis of more than eight thousand trees as well the memorials and interments of Green-Wood's permanent residents.

Green-Wood was founded on the premise that a cemetery could, and should, be a serene and beautiful place for the both the dead and the living. Today, over 250,000 people annually experience Green-Wood, joining the ranks of the millions of visitors who have stepped through its grand Gothic arch, including Charles Dickens, Mark Twain, King Kamehameha IV, Walt Whitman, Ulysses S. Grant, Eleanor Roosevelt, Franklin Roosevelt, Al Smith and most recently, Queen Noor of Jordan. Visitors are transfixed by the beautiful landscapes, the unrivaled views of Manhattan, New York Harbor and the Statue of Liberty and the unparalleled collection of 19<sup>th</sup> and 20<sup>th</sup> century sculpture and architecture.

GWHF raises funds to preserve and maintain Green-Wood including monuments of historical and cultural significance; to advance the public knowledge of Green-Wood; to conduct, sponsor, and host education programs in the community; and to safeguard the natural habitat and landscape of one of New York City's first green spaces.

### *Current Use of the Collection and Archives*

Green-Wood acknowledges that the potential impact of providing access to these millions of documents in its archives and the thousands of (mostly) unique items in its Collection is unknown. This is a core question the proposed project will address. Currently, GWHF's records are used on a very limited basis by scholars, genealogists and general researchers, although Green-Wood has welcomed authors who have requested access to its holdings. These include: Peter J. Nash, author of *Baseball Legends of Green-Wood Cemetery*; Benjamin Feldman, who penned three nonfiction books on Green-Wood residents, most recently *East in Eden: William Niblo and His Pleasure Garden of Yore*; Caterina Pierre of City University of New York who wrote *Preserving the Site-Specificity of Ruckstuhl's Minerva (1920) in Green-Wood Cemetery*; and Elizabeth Mitchell, author of *The Fearless Mrs. Goodwin: How New York's First Female Police Detective Cracked the Crime of the Century*. Andrew Dolkart, Director of the Historic Preservation Graduate Program at Columbia University, utilized Green-Wood's collection of mausoleum blueprints for his recent essay *Architecture at Green-Wood*. The archives offered each of these writers information that is currently unavailable to the public.

Over the years, GWHF has loaned pieces from its collections to other institutions, which have helped to expand public awareness of the cemetery and its permanent residents. In 2013, Green-Wood was the subject of an exhibition at the Museum of the City of New York, entitled *A Beautiful Way to Go: New York's Green-Wood Cemetery*. This exhibition commemorated the cemetery's 175<sup>th</sup> anniversary and featured items from

Green-Wood's collections, including original artifacts, sculptures, drawings, Hudson River School paintings, historic documents and photographs. Exhibited artifacts from the collection included a sewing machine manufactured by **Elias Howe, Jr.**<sup>30</sup> (1819-1867), a marble portrait of Civil War lieutenant **Henry Hidden** (1839-1862) by sculptor **Karl Muller** (1797-1840), stereo-view photographs of Green-Wood's grounds and more.

In March 2013, GWHF lent a large bronze sculpture of Civil War **Brigadier General Thomas Sweeny** (1820-1892) and an early photograph of General Sweeny to the Macculloch Hall Historical Museum in Morristown, NJ for *American Heroes in Bronze: The Artwork of James E. Kelly*. The Sweeny bronze was also displayed in 2007 at a Brooklyn Public Library exhibition entitled *Enshrined Memories: Brooklyn and the Civil War* and at Green-Wood's own *Honoring Their Sacrifice* exhibition in Green-Wood's Historic Chapel in 2011.

In 2015, as GWHF's first foray into digital humanities, the organization mounted an innovative art installation in conjunction with the 150th anniversary of the end of the Civil War. The installation, entitled *This is My House of Green Grass: The Raw Retrieval of the Civil War*, used Green-Wood's raw archival data on the 5,000 veterans of the Civil War who are buried in the cemetery. The data had been collected and entered into a database over a ten-year period by GWHF's Civil War Project volunteers. It included cause of death, age at death, profession and military rank for each soldier. Through rule-based text extraction, the project team explored previously unknown relationships between the interred veterans and conveyed these relationships acoustically and visually. The installation was mounted in the unique site of Green-Wood's Civil War-era Catacombs and premiered on the evening of GWHF's Grand Procession on Memorial Day.

### *Green-Wood's Archives*

Since 1838, Green-Wood has generated and meticulously retained an extraordinary number of records in association with the more than 570,000 burials in the cemetery. Accurate records are essential to the cemetery business, and in fact, state law requires that cemeteries keep records of all burials. These include documentation of ownership, heirship and more. However, what makes Green-Wood unique is its retention of letters and others communications in association with each burial. The result is an abundance of letters, notes and memos – many of which have historic significance. For example, the 1884 burial records of Theodore Roosevelt's first wife, who died after the birth of their first child, and of his mother who succumbed to typhoid fever just eleven hours earlier, document the tragic event that was the catalyst for Roosevelt's departure from New York City to the North Dakota badlands – a two-year stint on America's frontier that many historians postulate was critical to the path that he followed to become President of the United States. Other proprietary papers that have never before been available to the public include letters from family members about what they want engraved on a monument, requests to have burial plots opened when a family member has died and even long communiqués on why certain family members are absolutely not to be interred next to other family members. One particular note dated 1874 implored the cemetery to bury a deceased spouse "as deep as possible."

Over the last 177 years, with very few exceptions, Green-Wood's proprietary records have only been viewed by cemetery officials. Green-Wood's archival records include the following:

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<sup>30</sup> Names in bold indicate permanent residents of Green-Wood Cemetery.



**Documentation of the Cemetery's Founding.** The institutional records (approximately 2,000 cubic feet) document the cemetery from its earliest days to the present. They include original documents relating to the acquisition of cemetery property from prominent Brooklyn families including Bennett, Bergen, Wyckoff, and Schermerhorn, title searches, deeds and maps of Green-Wood's subsequent land acquisitions. Additionally, the archives hold documentations of the cemetery's founders and caretakers: **Major David Bates Douglass** (1790-1849), **Henry Evelyn Pierrepont** (1808-1888) and **Joseph A. Perry** (1807-1881). Early material from Major Douglass concerns the cemetery's financial matters and outlines the innovative engineering plan (today known as the landscape architecture plan) of curving roads, paths, ponds and hills. Other documents relate to **Hezekiah Beers Pierrepont** (1768-1838), his wife **Anna Maria** (1805-1839) and his son Henry Evelyn Pierrepont, who became known as the "first citizen of Brooklyn". Henry played a significant role in the planning of the City of Brooklyn and the establishment of Green-Wood itself; he is considered one of the first city planners in the United States. Other records include those of the cemetery's first comptroller, Joseph A. Perry, an unusually gifted writer and documentarian of Green-Wood's administrative activities, sales records and governance issues.

**Business Records of the Cemetery.** These are the lion's share of the institutional records. They are sorted by lot number, the cemetery's longstanding (and failsafe) record-keeping method. The records include "perpetual care" memos, cemetery finances, maps, photographs, heirship records and more. Document series contain 1) Receiving Tomb records; 2) Indexes to Interments; 3) Lot Books; 4) Cash Books; 5) Records of the Superintendent's office; 6) Records of the Trustees and Standing Committees; 7) Records of the Surveyor's; 8) Affidavit Series; 9) Wills; 10) Perpetual Care Files; 11) Memo Files; 12) Burial Orders; 13) Transfer Records; 14) Chronological Burial Logs; and 15) The Burial Files, which are neatly folded and carefully maintained in brown accordion envelopes, each enclosed by a cloth ribbon.

Among these, of particular interest are the **Transfer Records** which relate to families who transfer ownership of their burial lots from one generation to the next. Because these transactions required extensive paperwork, the records are exceptionally detailed. The records include an array of original source materials including wills, affidavits, family and cemetery correspondence, genealogical trees and charts, as well as mortuary monument designs, sketches, and blueprints pertaining to prominent New York personages and families. Notably, seventy bound volumes comprising 38,450 original documents (1850 to 1910) have been unbound, processed and microfilmed.

For scholarship in the field of public health history, the **Chronological Books** have tremendous potential value. Each burial recorded in these large-scale, handwritten books has several columns of data, including cause of death, age at death, nativity, occupation and most recent address. Green-Wood believes that these records present an extraordinary resource to the field of public health history.

**Architectural Drawings and Blueprints.** This collection contains over 150 series of designs, each of which has up to twenty individual drawings of mausoleums and other architectural features at Green-Wood. Most are for private family mausoleums, although the collection also includes blueprints for the Historic Chapel and the Fifth Avenue entrance gates (both by Warren & Wetmore) and plans for the mid-twentieth century Columbarium building. Other notable items in the collection include photographs and early designs of Frederick Ruckstull's Battle Hill monument – Minerva, the Altar to Liberty – and the nearby mausoleum of **Charles Higgins** (1854-1929), the creator of Higgins American India Ink. Additional series include records

for the Cooper-Hewitt family and also the family of **Johnny Torrio** (1882-1957), the mob boss who was the “mafia mentor” to Al Capone.

**Archival Photographs.** The photographic holdings contain numerous albums and loose photographs taken at various times throughout Green-Wood’s history. The collection includes two unique series entitled “Monument Marker and Border Photographs” and “Ivy Removal Photographs” with over 10,000 images documenting distinct changes to the condition of individual monuments over time.

### *Green-Wood’s Collection*

Jeffrey I. Richman, GWHF’s historian, has overseen the thoughtful acquisition of items for the collections for over a decade. Before then, the Green-Wood had no curated collection; fewer than 50 items and documents had been acquired or donated. Put simply, the cemetery had never seen its own history as noteworthy or something the public would be interested in. Today, the cemetery well understands the importance of its history and is committed to sharing it with visitors, New Yorkers, tourists and researchers. The items in the collections provide a unique contribution to how the cemetery commemorates and honors its permanent residents. Commenting on artwork in the Collection, Richard J. Moylan, president of both Green-Wood and GWHF, summed it up perfectly when he noted in the *New York Times* in 2007, “It’s one thing to stand at the grave site. But seeing the works of art these people created in their lifetimes gives them a kind of immortality.”

Over the past fifteen years, the GWHF has amassed an impressive collection of manuscripts, photographs, maps, and assorted ephemera related to historic figures interred in the cemetery. Some objects of note regarding GW residents include: a portrait of **DeWitt Clinton** (1769-1828), painted by **George Catlin** (1796-1872)<sup>31</sup>; a soda fountain (ca. 1875) made by soda fountain pioneer **John Matthews** (1808-1870); a baseball bat issued at the Baseball Hall of Fame’s very first induction of new members in 1938 bearing the name of “The Father of Baseball” and inductee, **Henry Chadwick** (1824-1908); and a gyroscope manufactured by its inventor **Elmer Sperry** (1860-1930).

GWHF is the custodian of 194 oil paintings by notable artists (and GW residents), including **Samuel F.B. Morse** (1761-1826), **Louis Comfort Tiffany** (1848-1933), **Asher Durand** (1796-1886), **Fanny Palmer** (1812-1876), **Philip Evergood** (1901-1973), **Eastman Johnson** (1824-1906), **Violet Oakley** (1874-1961), **William Holbrook Beard** (1825-1900), **William Merritt Chase** (1849-1916), **George Bellows** (1882-1925), **Louis Michel Eilshemius** (1864-1941), **Nancy Spero** (1926-2009) and **Hedda Sterne** (1910-2011). In addition, GWHF has a large collection of cabinet card portraits of many of the permanent residents, many by photographer and resident **Napoleon Sarony** (1821-1926), an acknowledged master of celebrity photographs, who succeeded Mathew Brady as the best-known portrait photographer in New York. Some of Sarony’s cabinet cards of other residents include popular theater actors such as: **Kate Claxton** (1848-1924), **Ada Rehan** (1859-1916), **Lester Wallack** (1820-1888), **James W. Wallack** (1794-1864), and **Maggie Mitchell** (1832-1918). GWHF also has several of Sarony’s self-portrait cabinet cards, which picture him with his trademark fez and Napoleon Bonaparte-style moustache.

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<sup>31</sup> Dr. Joan Carpenter Troccoli, founder of the Petrie Institute of Western American Art at the Denver Art Museum examined the portrait in 2007 and declared it to be the superior of the two Catlin portraits of DeWitt Clinton – the second of which hangs in City Hall in Manhattan.

Objects in the collection include a broad array of artifacts ranging from the quotidian to the extraordinary, including: a Whip car from a **William F. Mangels** (1866-1958) amusement park ride; art deco style radios by the famed industrial designer **Walter Dorwin Teague** (1883-1960); early gumball machines, which dispensed **Thomas Adams'** (1818-1905) Black Jack Chewing Gum; a Tiffany-engraved invitation to the opening of the Brooklyn Bridge in 1883; the stoneware of the **Clarkson Crolius** (1774-1843) family (masters of American folk ceramics); prints and many more items that were created by GW residents. Nineteenth-century advertisements for **Steinway & Sons** pianos and **Eberhard Faber** (1822-1879) pencils are among more than three dozen similar original promotional announcements.

Finally, although it is not within the purview of this project, GWHF maintains a **Research Library** of over 750 titles, many of which are rare and out of print. Topics include the history of the cemetery, early biographies of many of its permanent residents, as well as the histories of Brooklyn and New York City. Books about the cemetery itself underscore Green-Wood's popularity as a 19<sup>th</sup> century tourist destination. They include *Visitors' Pocket Guide to Green-Wood Cemetery*; by **John Mountain** (d. 1893); *Green-Wood Illustrated in Highly Finished Line Engraving From Drawings Taken on the Spot* by **James Smillie** (1833-1909) with descriptive notices by **Nehemiah Cleaveland**, (1806-1877); and Cleaveland's *Green-Wood Cemetery: a History of the Institution from 1838 to 1864 and Hints Concerning Green-Wood, its Monuments and Improvements* (1853.)

#### *Importance of the Proposed Project*

GWHF proposes to engage a panel of carefully selected experts in the humanities and in the field of digital technology to closely examine Green-Wood's archives and collections and to craft a creative, comprehensive and achievable plan to make them widely available beyond Green-Wood's internal operations. GWHF will pay special attention to the potential for uncovering trends and patterns from this immense volume of data and its metadata. This is especially true with regard to the data on cause of death, found in the Chronological Books. It is the goal of GWHF to put this wealth of information into the hands of the public, by joining the archives and collection together in a unique partnering of digital data. By utilizing the smartphone application and accompanying website associated with the ICES program (described below), a user could research any permanent resident at any time.

Our preliminary talks with archival specialists who are familiar with Green-Wood's holdings, including Alan Balicki, Chief Conservator at the New-York Historical Society Museum & Library, confirm that the current storage practices ensure the stability and security of the materials. They agree that the archives and collections are properly housed and stored (details below). Further, they concur that the sheer volume of Green-Wood's holdings is remarkable and provides great potential for new scholarship.

GWHF fervently hopes that this project can become a model for the hundreds of thousands of cemeteries around the country and around the world. Because every cemetery, regardless of its age, affiliation or size, is legally required to retain the business records pertaining to all of its internments, and because no cemetery has yet digitized those holdings and made them available to the public (except for online burial searches), every cemetery has its own hidden collection. The collective contribution to scholarship if even a small percentage of these cemeteries moved to make their records publicly available would be quite substantial.

GWHF believes that by making the archives and collection more accessible to the humanities field and to the public, the following goals will be achieved:

- Presenting its hidden collection of materials to the public, allowing new scholarship, research and historical analysis to take place;
- Broadening GWHF's audience and strengthening its position as a leading cultural and historical institution;
- Establishing a model for other cemeteries around the world to make their records available; and
- Bridging the gap, utilizing technology, between Green-Wood's archives and collections and the information seekers of today.

### **History, Scope & Duration**

To date, GWHF has undertaken several tasks to ensure that the archives and collections are stable and secure and that the organization has intellectual control over its holdings. In addition to several capital investments over the past three years (a Zeutschel Omnican12 book scanner and a new set of metal-reinforced shelves in its temperature- and humidity-controlled collections area), GWHF was honored in 2014 to receive a \$42,000 grant from the Institute of Museum and Library Sciences to conduct a conditions survey of the roughly 7,000 items in its collections. Three conservators (experts in art, paper and objects conservation) completed the project in spring 2015 and reported that 96% of the collection is in stable condition. Only 312 works on paper, twenty paintings, and one object are Priority 1 (requiring emergency care). GWHF is currently soliciting funding to begin the conservation of the Priority 1 items. Green-Wood also received a \$29,261 grant award from the New York State Division of Library Development Discretionary Grant Fund to conserve and microfilm over 70,000 Transfer file records. Also in 2014, GWHF received \$1,600 from the Greater Hudson Heritage Network to restore an original pen and ink drawing of Green-Wood's landmarked Gothic Arch, sketched in 1861 by its architects Richard Upjohn & Son. The drawing is now prominently displayed in Green-Wood's newest chapel building, where it will be seen by approximately 25,000 people annually.

This proposed project is part of a larger plan to help Green-Wood expand its scope and become a major cultural and historical institution, while also applying 21<sup>st</sup> century technology and standards to documents that date back to the mid-19<sup>th</sup> century. GWHF's strategic plan outlines a vision for the future in which archives are fully accessible to scholars, researchers and to the public. To that end, GWHF seeks to present its archives and collections digitally via a software program Green-Wood owns and has used for over a decade: the Integrated Cemetery Enterprise System (ICES) developed by InteraUS. The program is used by more than twenty five cemeteries in North America; however none to date has utilized the full potential of the program to upload all of its archival and collections records and make them available publicly. The program has an impressive graphic interface, a GIS component and a tremendous capacity for digital images. The burial search function is already being utilized at designated visitor kiosks within the cemetery, and another component is utilized by Green-Wood's administrative staff. Both aspects of the software have proven to be reliable and well-received by users.

### **Methodology and Standards**

This project will be innovative and pioneering. Green-Wood believes that it is the only cemetery in the nation – and perhaps the world – with archives and artifact collections of this scope and size. By formulating a plan

to make them accessible to the public, GWHF can enhance the visitor experience and also expand the offerings to those who visit Green-Wood via its website. Again, GWHF underscores its goal to share the outcomes of this project plan with cemeteries around the world. The project team will include select GWHF staff, humanities scholars and technology experts in the fields of archives management, collection management and digitization. Together, these professionals will: review GWHF's current capabilities in reference to its archives and collections; assess the scholarly value of the organization's holdings; evaluate digitization needs; and make recommendations for next steps.

Each of the consultants for the team was chosen by GWHF's staff for their relevant knowledge and expertise. Each will make a unique contribution to this project, which is described in the Consultants section of this proposal. With complementary areas of expertise, the advisory board members will each present his/her perspective and recommendations. They will communicate with each other throughout the duration of the project, so that the work will be collaborative and creative.

The project will be executed through on-site meetings and consultations that each panelist will be required to attend. All activities will be recorded and each panelist will produce a written report that will outline his/her recommendations. This project will be directed by Anthony Cucchiara, GWHF's Archivist. He will coordinate all activities and will combine the written reports into one comprehensive white paper.

The academic panel will be divided into two teams, Humanities and Digital, which will work concurrently but with different goals. The Humanities team will be focused on the exploration of the archives and collection, how the records and items can be best utilized and how and what kind of information can be gleaned that will advance scholarship in the humanities field. To this end, GWHF sought consultants who are experts in the fields of urban history, public health history and collections management. With direction from GWHF's Archivist, Historian and the Manager of Historical Collections, these three consultants will examine and assess GW's holdings to understand their importance to their respective fields. The three-person Digital team will work on two fronts. First, they will outline the logistics for standard digitization of the records and making them searchable, plus estimated costs, work schedule and a potential time frame. Second, using a digital humanities perspective, the team will consider how technology could lead to new and unexpected interpretations of the data. The Digital team will begin with a review of the controls and safeguards already in place at Green-Wood.

#### *Collections and Archives Environmental Controls*

As early as 1991, Green-Wood retained archivist Sally Brazil to conduct a thorough conditions survey of Green-Wood's holdings. Using her thorough recommendations, Green-Wood constructed a new storage facility that was completed in the mid-1990s, which incorporated environmentally controlled and secure archival storage. In 2009, GWHF embarked on a rigorous records preservation program by allocating funds to process and preserve archival records that reside outside of the archival storage room. Records housed in highly acidic enclosures, bound together by rubber bands and folded and heavily creased are now being re-housed in perma-life folders and document cases, with folded documents unfolded, flattened and damaging fasteners removed.

The archives are currently housed in the GWHF's archives storage room, which measures thirty-three feet by twenty-two feet with a nine foot ceiling. It is equipped with a ventilation and air conditioning (HVAC) system to maintain the requisite temperature setting (65 to 68 degrees) and relative humidity range (40 to 50%). Four years ago, Pem-Data monitors were installed to track temperature and relative humidity levels much more closely and accurately over long spans of time. Temperature and relative humidity (<50%) ranges within the archival storage facility are ideally suited.

GWHF staff has employed best practices for museum-quality storage and has prepared secure storage areas appropriate for each type of item in the historic collection. GWHF has been expertly advised on storage by Mr. Cucchiara. The collection is held in storage rooms that are controlled for temperature and humidity and items are stored in acid-free boxes. The collection is overseen by Mr. Richman and Stacy Locke, the Manager of Historic Collections. As new items are added to the collection, they are assigned registration numbers and catalogued in PastPerfect, GWHF's collections software.

GWHF implemented a disaster preparedness plan in January 2012 that was developed in accordance with the D-Plan template designed by the Northeast Document Conservation Center. The plan identifies critically important personnel including a response and recovery team, vendors, equipment and outside consultants, as well as identification of those records most important to salvage. Several workshops were held in 2012, addressing procedures for water damaged materials and documents, particularly the proper drying procedure for water damaged microfilm. GW is delighted to report that in the wake of Hurricane Sandy – when Green-Wood incurred millions of dollars of damage to the property – there was no damage to the archive or the collections. GWHF offers disaster preparedness workshops for staff and volunteers quarterly.

#### *Collections and Archives Intellectual Controls*

Since 2009, GWHF has been using ARCHON, an archival management tool, to manage and exercise intellectual control over its archives. In the coming months, GWHF plans to migrate to ArchivesSpace which allows participating institutions access to the finding aids of collections around the world. ArchivesSpace is used by the vast majority of archival collections and historical institutions to catalog their holdings. For its historic collection, GWHF uses PastPerfect cataloging software. To date, every item in the collections has been photographed, itemized in detail and entered into this collections management software program. The software allows for easy access to the details of the collection and tracks the data for each item. For this project, the digital team will be asked to formally consider if GWHF should use Encoded Archival Description (EAD), an XML standard for encoding archival finding aids.

In addition, the digital team will: make recommendations on the most efficient way to digitize the diverse holdings; how to integrate the digitization into GWHF's existing database program, ICES; and how to properly catalog the records. An especially important consideration will be the huge volume of handwritten records, how and if to make them searchable and the costs and timeframe for this work.

#### *Privacy Policy*

Both teams will be charged with formalizing a privacy policy for the archives and collections. Currently, GWHF's standard practice is dictated by Federal law, which states that unpublished works enter into the public domain after the author's death plus seventy years. Because Green-Wood opened in 1838, it has millions of documents that could be made public. However, opinions (especially among other historic cemeteries) vary. Some maintain that privacy for lot holders trumps Federal public domain laws. The consultants will discuss these and other issues (with the exception of the institutional records which are proprietary) and make policy recommendations.

### **Sustainability of Project Outcomes and Digital Content**

As GWHF devises its exciting future – which includes several expansion projects – this project will be at the forefront of its planning. GWHF is currently undertaking a restoration and adaptive re-use of the landmarked, Victorian-era Weir Greenhouse, located just outside Green-Wood's main entrance, to be used as a Welcome Center. A neighboring administrative building will house exhibition space and an archive study center and library. Gracious donors have already pledged \$1 million toward the center and library, which will allow researchers, scholars and the general public to access Green-Wood's archives. A plan for digitization of the records is the critical first step toward making this all possible.

This grant will ensure that GWHF has a living document that is prescriptive and specific and will govern the future of its archives and collections. An essential element of the plan will be the requirement that digitization of records is sustainable in perpetuity and that the records remain the property of Green-Wood. That requirement will govern future digitization as well, so that all records -- whether digitized this year, next year or next decade -- will become part of GWHF's unified, stable and carefully considered technology plan.

For over two decades, Green-Wood has placed a premium on technology and has emphasized its importance to the future of the cemetery. This approach differentiates Green-Wood from most cemeteries in America, which typically make only modest investments in technology. Under the direction of Richard Salles, the founding partner of the cemetery's technology firm, Remote Managed Services, LLC, Green-Wood's data is automatically backed up nightly to ensure the security and safety of all of Green-Wood's and GWHF's records. Salles and his team have worked with Green-Wood for seventeen years. During this time, the firm has engineered a technology plan with a built-in redundancy: an Equallogic Storage Area Network device (SAN) is backed up every night to two other smaller Synology SANs in two separate, offsite locations. The backups are performed using Veeam virtualization and three redundant hosts, each of which holds several terabytes of data. In addition, a cloud-based backup solution, Carbonite, is utilized to augment the hard-drive servers.

The ICES program uses SQL database and is backed up daily; Remote Managed Services uses Veeam software to perform additional backups for Green-Wood. All data that is entered into ICES is hosted on GWHF servers, which ensures GWHF retains all information and faces no business risk connected to the software provider.

### **Dissemination**

The results of this project – which will be presented in a white paper – will be shared with our numerous partner institutions (e.g. Brooklyn Historical Society, Museum of the City of New York, the Museums Council, etc.), but most importantly, with the vast network of cemeteries around the country of which Green-Wood is a very active member (e.g. the International Cemetery and Funeral Association, the New York State

Association of Cemeteries, the Metropolitan Cemetery Association). Further, GWHF will share its plan with the archives community, including Society of American Archivists, the New York Genealogical and Biographic Society and more. GWHF will present at national and local meetings and will publicize the findings to national publications including the Society of American Archivists' "Archival Outlook" and "American Archivist." The white paper will also be presented to The Archivists Round Table of Metropolitan New York.

## **Work Plan**

The project's work plan has three goals, all of which will be addressed through the work plan outlined below.

1. An assessment of Green-Wood's holdings by four experts in various areas pertaining to Green-Wood and its place in New York history, in order to assess their inherent value to the humanities field.
2. A thorough review of Green-Wood's digital needs by three archive management experts. Their recommendations will pave the way for GWHF to share its holdings with scholars and the general public.
3. The writing of a work plan describing the academic panel's findings. The white paper will include specific technological details for the digitization.

## *Time Schedule*

**May 2016** – The first convening of the academic panel. At this time, every panel member will be required to spend the entire day at Green-Wood for an orientation meeting. At this meeting, the panelists will take a tour of Green-Wood's grounds and receive a history lesson about the site. They will also tour the archives and the collections, and receive an introduction to the technology Green-Wood currently utilizes. This meeting will be led by Mr. Cucchiara, Mr. Richman, Ms. Locke and Lisa Alpert, GWHF's Director of Development & Marketing.

**June – January 2017** – Individual assessments by the academics. Mr. Cucchiara and Ms. Locke will schedule individual time with each panelist in order for them to look through the records and/or digital files. Each panelist will be directed to the specific archive that is focused on their specialty and will help them conduct their research. While at Green-Wood, the digital team will also have access to GWHF's technology (e.g. Archon, PastPerfect) that is currently being utilized.

**February 2017** – Final meetings of the Digital and Humanities Teams at Green-Wood. The panelists will meet with their respective teams in order to corroborate information and ensure that there is agreement on recommendations for next steps. Mr. Cucchiara will lead these final meetings.

**March – April 2017** – The writing of the white paper. During the last two months of the year, each panelist will write their final findings and recommendations. Mr. Cucchiara will assemble all the individual findings into one comprehensive white paper, which will be shared with GWHF staff, other interested parties and similar institutions.



During the year, panelists will have open access to GWHF staff, as well as Mr. Tavi Gherman, the President of InteraUSA and the creator of the ICES platform. In addition, members of the digital team will also have contact with GWHF's technical consultant, Richard Salles.

## **GWHF Staff**

This project will be a collaboration between GWHF staff and outside consultants, each of whom is extremely knowledgeable and highly regarded as an expert in his/her respective field. The GWHF staff members involved in this project will include:

**Richard J. Moylan**, President of Green-Wood Cemetery and the Green-Wood Historic Fund, will provide broad leadership for this project, exactly as he has guided the Cemetery since 1986. It is Moylan's vision that has expanded the role of the cemetery to now embrace that of a cultural institution — opening its gates to the community for educational tours, concerts and programs. These events draw on the great historical significance of the cemetery as the final resting place for many famous and infamous figures in American history. Mr. Moylan will participate in the group sessions with the consultants and will be the final decision maker over the entire project. He will devote 5% of his time to this project.

The Project Director is **Anthony M. Cucchiara**, GWHF's Staff Archivist. He will ensure that the staff and academic panel work in tandem and toward the same objectives. Mr. Cucchiara will assemble the minutes and conclusions of the project meetings and will compile the consultants' reports. He will also schedule all meetings and ensure GWHF staff is available to the panel with any questions or inquiries. He will devote 25% of his time to this project.

**Jeffrey I. Richman**, GWHF's Staff Historian, will serve as a special consultant to the project and lend his expertise and knowledge of Green-Wood's history to the panel. As Green-Wood's longstanding expert on the history of the property and its inhabitants (he has served the cemetery since 1991 and as historian since 2000), he will be the primary point of contact for institutional history and will deliver the introduction and cemetery tour during the orientation meeting. He will devote 5% of his time to the project throughout the year.

**Stacy Locke**, Manager of Historical Collections, will coordinate work schedules among the consultants and will ensure their access to the archive and collection. She will be readily available to work with each consultant as they research the collection. As the "keeper" of the collection, she will be the main contact for logistics and cataloging, providing instructions on where items are stored, etc. During the year, she will devote 25% of her time to this project.

GWHF's Director of Development & Marketing, **Lisa Alpert**, will oversee grant activities and will ensure that all project tasks are completed on time and according to the work plan. Ms. Alpert will also be in constant contact with the Project Director and the academic panelists, in order to gauge their progress so she

can begin to prospect for additional funds which will be needed for the next phase of the project. She will devote 5% of her time to this project.

## Consultants

The project consultants are divided into two groups: humanities and digital/archival management. They will each spend four days at Green-Wood, investigating the archive and collection, including the opening and closing meetings. They will compile their results off-site.

### *Humanities Team*

**Julie A. Golia** is the Director of Public History at the Brooklyn Historical Society. She is also the co-editor and co-founder of TeachArchives.org, an award-winning educational resource for students learning archive management. Golia brings significant knowledge and scholarship in Brooklyn history to the team, as well as an unwavering enthusiasm for Green-Wood and its potential contributions to the study of New York City history.

**Thomas Kessner** is a Distinguished Professor at the Graduate Center of the City University of New York. His academic focus is American, urban and social history, and he is the author of five publications – including *Today's Immigrants, Their Stories: A New Look at the Newest Americans* (with Betty Boyd Caroli) and *The Golden Door: Italian and Jewish Immigrant Mobility in New York City*. As an urban historian, he will be tasked with reviewing the overall body of documentation at Green-Wood and considering its importance to the humanities field. In particular, he will focus on its contribution to the field of New York history as well as to 19<sup>th</sup>- and early 20<sup>th</sup>-century studies.

**David Rosner** is the Ronald H. Lauterstein Professor of Sociomedical Sciences and Professor of History in the Graduate School of Arts and Sciences at Columbia University. He is also Co-Director of the Center for the History and Ethics of Public Health at Columbia's Mailman School of Public Health. Rosner will examine the collective significance of the cause-of-death data for the over 570,000 individuals interred at Green-Wood. In addition, he will use his expertise to identify patterns and trends in the data, while analyzing the contributions these documents may make to the field of public health history.

**Lacey Schutz** is the Executive Director, Shaker Museum, Mount Lebanon. In addition to her considerable expertise as an archivist, Schutz brings impressive expertise in collections management to the team. Uniquely, her experience is valuable to both the humanities and the digital teams; as Schutz also managed the Museum's massive digital access project that now provides online access to 200,000 museum objects. Ms. Schutz will assess the scholarly value of Green-Wood's archives and collections, in addition to their potential importance as the basis of future exhibitions and other public access opportunities.

*Digital/ Archival Management Team*

**Anthony Cocciolo**, Associate Professor at the Pratt Institute, School of Information and Library Science, performs research and teaches about archive management, with a speciality in the digital aspects, such as born-digital archiving, digitization and computer-mediated access.

**Zannah Marsh** is a Senior Content Developer at Local Projects, where she is responsible for the content and implementation of new media projects for museums and cultural institutions. Ms. Marsh was an Adjunct Professor at CUNY's Borough of Manhattan Community College; she has also taught at NYU's Interactive Telecommunications Program and in the New School's Media Studies Graduate Program. For this project, she will incorporate a digital humanities approach to the archives, and will contribute profound ideas on ways to analyze and utilize the holdings.

**Julie I. May** is the Managing Director of the Library & Archives at the Brooklyn Historical Society, where she oversees the organization's significant collections that pertain to the history of the borough. In reviewing GW's archives, she will recommend policies and procedures that will ensure their sustainability. She will pay particular attention to Green-Wood's institutional practices in cataloging.

Together, these three panel members will help GWHF formulate its best plan for the digitization of its institutional archives. They will conduct an assessment of GWHF's current capacity and the organization's future needs in terms of technology. They will address issues related to standards and guidelines, as well as the costs and potential benefits of making the handwritten 19<sup>th</sup>-century records fully searchable. They will craft a series of recommendations for next steps and will submit all findings for the white paper.

## **Appendix B**

### **The Green-Wood Historic Fund List of Project Participants, Consultant and Advisors**

#### **Alpert, Lisa W.**

Green-Wood Cemetery, The Green-Wood Historic Fund

#### **Cocciolo, Anthony**

Pratt Institute, Society of American Archivists, Archivists Roundtable of Metropolitan New York, Mid-Atlantic Regional Archives Conference, Association of Library and Information Science Education, American Library Association

#### **Cucchiara, Anthony M.**

Green-Wood Cemetery, The Green-Wood Historic Fund, Pratt Institute, Brooklyn College

#### **Golia, Julie A.**

Brooklyn Historical Society, TeachArchives.org, Organization of American Historians, Woman Suffrage Centennial/WomensActivism.nyc, New-York Historical Society's Center for the Study of Women's History

#### **Jeffre, Elizabeth**

Trustee, Green-Wood Cemetery

#### **Kessner, Thomas**

CUNY Graduate School, Museum of the City of New York

**Locke, Stacy E.**

Green-Wood Cemetery, The Green-Wood Historic Fund

**Marsh, Zannah**

Turbulence, Mozilla Foundation

**May, Julie I.**

Brooklyn Historical Society, Society of American Archivists, Archivists Round Table of Metropolitan New York, ArchivesSpace User Advisory Council

**Moylan, Richard J.**

Green-Wood Cemetery, The Green-Wood Historic Fund, New York State Association of Cemeteries, National Sculpture Society, Williamsburg High School of Art and Design, The New York Preservation Archives Project

**Richman, Jeffrey I.**

Green-Wood Cemetery, North Shore Civil War Roundtable, Association for Gravestone Studies, Civil War Trust, Center for Civil War Photography

**Rosner, David**

Mailman School of Public Health, Columbia University, Mt. Sinai School of Medicine

**Schutz, Lacy**

Executive Director, Shaker Museum, Mount Lebanon.

## **Appendix C**

### **Humanities Team Members**

**Julie Golia, Tom Kessner, David Rosner, Lacey Schutz, Elizabeth Jeffe**

As you explore our holdings, there are several things we would like you to consider and ultimately address in your final recommendations. As we discussed in the meeting, Green-Wood has determined that its next most critical undertaking is the organization and digitization of its vast archive of institutional records. Green-Wood's goal is to make these records accessible to scholars in the humanities field and to the general public.

#### **Questions to Address**

- What potential projects, themes or areas of research can you envision for these records? (We hope this list will be long.)
- What kind of information can be gleaned from these records? What are potential avenues of research?
- What will Green-Wood need to do to make these records known to the research and academic communities?
- What trends or patterns in the data may be of interest?
- How could Green-Wood improve the way we arrange and present our materials so that they may best be used by researchers?
- Is there anything we can do to improve our intellectual and environmental controls over the materials?

- Consider issues of privacy and public access; what sort of Privacy Policy would you recommend?
- What larger ideas or concepts come to mind when pondering Green-Wood's future? What unique qualities or advantages does Green-Wood have over other institutions?
- One of our goals for collection and the archives is to bring people to Green-Wood to see the original documents and items. How can we achieve that, while still making them widely accessible digitally? If everything is available online, have we eliminated any reason for people to visit?
- What options does Green-Wood have in regards to how and to what extent we share our records with the public? What gradations exist between full online free public access of all our records and restricted onsite access?
- If Green-Wood makes records publicly available online, would you suggest the use of a watermark? Considering the benefits and issues associated with use of a watermark, how might we make our records most accessible, but limit reproduction, etc.?

To what degree do you believe Green-Wood, as a private institution with potentially sensitive materials regarding death and burial, has the ability to reproduce these materials at our discretion? Is the privacy of our customers and residents a concern?

## **Digital Team Members**

**Anthony Cocciolo, Zannah Marsh, Julie May**

As you explore our holdings, there are several things we would like you to consider and ultimately address in your final recommendations. As we discussed in the meeting, Green-Wood has determined that its next most critical undertaking is the organization and digitization of its vast archive of institutional records. Green-Wood's goal is to make these records accessible to scholars in the humanities field and to the general public.

## **Questions to Address**

- What is the best way for Green-Wood to digitize its materials? How might we prioritize and manage such a project and what might be the costs and timeframe for this work?
- Please consider both the format and content of the record groups and how this may impact our process. Consider handwritten records and the possibility of making them searchable.
- What type(s) of database(s) would you suggest for accessing our digital materials? Consider the platform GW is currently using, the ICES (Integrated Cemetery Enterprise System) as a potential platform.
- What kind of metadata might be employed?
- Consider if GWHF should use Encoded Archival Description (EAD) for encoding archival finding aids.
- Consider issues of privacy and public access; what sort of Privacy Policy would you recommend?
- Green-Wood is currently considering whether it is in our best interest to make our records publicly available online or to exercise a greater degree of control over the information. To what degree do you believe Green-Wood, being a private institution, should make our materials accessible?
- What larger ideas or concepts come to mind when pondering Green-Wood's future? What unique qualities or advantages does Green-Wood have over other institutions?
- One of our goals for collection and the archives is to bring people to Green-Wood to see the original documents and items. How can we achieve that, while still making them widely accessible digitally? If everything is available online, have we eliminated any reason for people to visit?
- What options does Green-Wood have in regards to how and to what extent we share our records with the public? What gradations exist between full online free public access of all our records and restricted onsite access?
- If Green-Wood makes records publicly available online, would you suggest the use of a watermark? Considering the benefits and issues associated with use of a watermark, how might we make our records most accessible, but limit reproduction, etc.?



- To what degree do you believe Green-Wood, as a private institution with potentially sensitive materials regarding death and burial, has the ability to reproduce these materials at our

## **Appendix D**

### **Reports of the Consultants**



## **NEH Grant for Green-Wood Cemetery: Digital Team**

Created by Anthony Cocciolo

Updated July 27, 2016

### **Overview**

Since 1838, Green-Wood has generated and retained records in association with the more than 570,000 burials. The goal of this report is to offer a multi-optioned plan for the digitization of Green-Wood Cemetery's institutional archives based on an overview of the records, current technological capacities, and cost and benefits of making available these records to researchers and the general public.

### **Records Overview**

Although not an exhaustive list of all records available at the cemetery, some basic groups of records include:

#### *1. Burial orders by plot number*

The largest group of records are the burial orders organized by plot number. The records include an array of original source materials including wills, affidavits, family and cemetery correspondence, genealogical trees and charts, as well as mortuary monument designs, sketches, and blueprints pertaining to prominent New York personages and families. These records were originally folded in brown accordion envelopes, which are in the process of being unfolded and relocated to acid-free folders stored in an archival storage environment. These records are often handwritten, with some records making use of standardized forms. As the documents in a file are often of different sizes and have fasteners, they are ill-suited for being fed into automatic document feeders.

#### *2. Chronological burial books*

This group of records is comprised of about 22 bound volumes that chronologically list each burial, beginning with the earliest in 1838 and running through the 1930s. This includes name, date, and cause of death, among other pieces of information. Making use of a standardized form similar to an early census record, these records are handwritten.

#### *3. Lot books*

This group of bound books document the ownership of given lots, and are actively added to. Further, new lot books continue to be added to new lot books. This is an important group of records for running the cemetery business, but may have less researcher value

than some of the earlier groups of records.

4. *Burial abstracts on index cards organized by plot number*

This group of records provide basic information about the burials in a giving plot, organized by plot number. Because more full information is available in other records, these records are not high-priority.

5. *Burial abstracts on index cards organized by name*

This group of records is similar to the previous, allow for locating plots based on person's name. Because more full information is available in other records, these records are not high-priority.

6. Memo files

This group of records document activity related to a plot outside of burials. These records are very important for cemetery business, but may be of less interest to researchers compared to the earlier records.

7. *Architectural drawings and blueprints*

These architectural drawings include bound-books (like the surveyor books) as well as oversized blueprints. Some of these records, such as the surveyor books, have already been digitized and metadata created locally.

8. *Archival photographs*

Approximately 10,000 images document the cemetery, some of which have been digitized and entered into the object's PastPerfect database.

9. *Object collection*

Objects such as paintings and other ephemera are part of the object collection, and have been catalog in a PastPerfect database.

## **Privacy Concerns**

For burial records, there are obvious privacy restrictions. To address this concern, records that were created within the last 70 years should not be made available to researchers or the public. As there are millions of documents created before 1923, there are large quantity of information that can be made accessible without concern for copyright restrictions. Since plots may be transferred in a family or organization from one generation to the next, and some plots may

have openings for future burials, some plots may have some very old records interspersed with more recent records.

### **Active vs. Inactive Records**

One issue that makes this project particularly challenging is that some documents and files continue to be added to as the cemetery continues to take on new burials. Thus, books have new text appended to them, file folders receive new documents added to them, and new burial abstracts are created and filed. Thus, it is important to attend to the issue of which records may be added to so that if digitization were to occur, the digitization would not become “out of date” as new information is added to these books or files. One option is to make a full-transition from paper-based record keeping to digital record-keeping. Book-based recording keeping could be transitioned to digital by digitizing the book and adding new annotations via the Adobe Acrobat annotation/comment features. Folders could be added to via depositing documents into electronic folders (e.g., folders organized by lot number stored on a network share).

### **Technology infrastructure**

The cemetery has some technology infrastructure in place for conducting small-scale digitization activities. This include the following components:

- *Image Capture* - Zeutschel Omniscan12 book scanner: this device can be used for scanning books and other large flat documents.
- *Archival Content Management* - Archon: This system is used for creating DACS/EAD finding aids, and can be used for hosting archival records. As Archon is no longer being supported, transitioning to a new archival content management system within the next ten years may be necessary to stay abreast of latest technologies (e.g., Access to Memory - AtoM, Archives Space, etc.).
- *Object Management* - PastPerfect: This system is used for cataloging objects in the collection, and includes an image of nearly all items.
- *Computing environment* - The Cemetery has a standard office computing environment, including Wifi/internet, network storage, and modern computers, enabling small-scale digitization.
- *Other Tools* - Integrated Cemetery Enterprise System (ICES) - Although not strictly an archival management system, this system allows for the uploading of documents associated with plot numbers, and plots are associated with searchable names.<sup>32</sup> Plots are shown via an interactive GPS-enabled map.

### **Pre-Digitization: Making Available Open Data**

Although Green-Wood provides a functionality for searching its burial database, the only issue with this system is name searches in sites such as Google would never turn-up Green-Wood as

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<sup>32</sup> <http://www.cemeterycloud.com/ICES/documents/Videos/GeospatialPlatform.html>

a repository of records about that person. Basically, this data resides in what is known as “the deep web.” As Green-Wood is interested in having researchers and genealogists come to Green-Wood to use their records, making available open-data on the web is recommended so that searches in sites like Google will return Green-Wood’s website. A simple XML data structure for storing this open information could include information like the following:

```
<plot id="2243">
  <burial name="Clinton, DeWitt" date="1828-02-11" />
  <burial name="Franklin, Maria" date="1835-02-33" />
</plot>
<plot id="2244">
  <burial name="Basquiat, Jean Michel" date="1988-08-12" />
</plot>
```

This information could be exhibited as a simple HTML file, with options for downloading the XML version. The XML files can be used by researchers for their own original research. This could augment other data such as EAD/DACS finding aids in Archon that have yet to be published.

## Plans for Digitization

Note that the following plans are not mutually exclusive; they can be combined to produce a digitization program that fits expected resources.

### *Plan #1 - Full Digitization with Vendor Support*

One plan that has already been developed is to have the records digitized by Backstage Library Works using on-site contractors and setting up new equipment. The plans for these digitization projects are summarized below:

Record Groups	Pages	Cost
Administrative Office Records	1,890,740	\$1,311,841.00
Executive Office Records	198,798	\$153,457.86
Archives Records	523,016	\$402,984.52
<b>Total:</b>	<b>2,413,756</b>	<b>\$1,868,283.38</b>

This digitization project presents several challenges. First, although this would produce images of all the records, additional work would be needed to establish how this information will be presented to end-users (linked in via finding aids? Accessible via ICES?). Second, additional work would be needed to separate out records that can be presented to end-users and which ones have privacy restrictions. Third, the overall cost makes this option appear somewhat daunting to fund, and would still require all the aforementioned work be completed.

### *Plan #2 - Curated digitization of burial orders*

To give a sense of the kinds of records that are available, another option is to select two-hundred notable inhabitants of Green-Wood from over 70 years ago, and digitize their burial lot folders. To simplify the digitization, rather than parsing out individual items in the folder, this could include digitization by folder, producing a multipage PDF/A file that can be readily viewed on the web. These digitized records could then be linked-in via the online finding aid. This will give researchers a sense of the kinds of records that Green-Wood has, and will also help the staff understand the work involved in separating-out records for privacy restrictions (if such an issue exists). This option could be completed using existing technology, such as the scanner and Archon database.

### *Plan #3 - On demand digitization*

One option is that when groups of records are requested, that they are digitized after being reviewed by a researcher. A researcher interest in a group of records may indicate that they are of wider interest. Once digitized, they can be linked in via the online finding aid. For researchers unable to visit Green-Wood, requests to digitize folders and have them sent to them could also produce a small revenue stream. Once digitized, they can be linked in via the finding aid, thus making them available to future researchers for free.

### *Plan #4 - Chronological book digitization with transcription*

Where the burial order folders may have material with privacy restrictions, the advantage of digitizing the chronological burial books is that should be no privacy restrictions (since they end in the 1930s). Whereas these volumes follow a very standard format (similar to the handwritten census records from the early 20th century), making available all of the hand-written text can be a challenge. Past efforts to transcribe large amount of records such as the census records show that both crowdsourcing and hiring indexers can be effective.<sup>33</sup> Further, recent work of the Smithsonian Transcription Center, among others, indicates that crowdsourced transcription can work.<sup>34</sup> A number of tools can be deployed on the web to facilitate the transcription. Notable tools include:

From the Page - <http://fromthepage.com/>

Scripto - <http://scripto.org/>

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<sup>33</sup> Ruggles, S., Fitch, C. & Sobek, M. (2013). "Big Microdata from the U.S. Census". Available at: <http://paa2014.princeton.edu/papers/141458>

<sup>34</sup> <http://transcription.si.edu/>; Ben W. Brum, "Choosing Crowdsourced Transcription Platforms at SSA 2013", available at: <http://manuscripttranscription.blogspot.com/2013/05/choosing-crowdsourced-transcription.html>

Transcription of such records, like the census, would want to take advantage of the highly standardized form of the chronological books (essentially a big table).<sup>35</sup> Thus, being able to segment the images and produce discrete fields (name, cause of death, date of death, etc.), will help make the data produced more useful to researchers. The possibility of using computer vision algorithms, such as automatically identifying frequently re-occurring pieces of text (e.g., place of death: Brooklyn), is an option that should be more fully explored.

Alternatively, if crowdsourced-transcription is not selected, firms for outsourcing transcription exist, such as Digital Divide Data (<http://www.digitaldividedata.com/>). Thus, digitization and transcription can be separated among vendors or completed through a single vendor.

It is recommended that transcribed books are made available in formats well-suited for data analysis by researchers, such as Excel spreadsheets, CSV files, XML files, etc.

#### *Plan #5 - Incorporation of digitized content into ICES*

The option of making available digitized content in ICES is a compelling option. The system has options for publishing information to the web, including smartphones and tablets, such that visitors to the cemetery can search for inhabitants, see the location of the plot on the map, and view digitized records. This option could also prove useful to cemetery staff who regularly use this tool. However, having the records available to the public only in this form should be avoided. The reason is that should someone search for a name in Google, it would likely not come-up in a search result because these results form part of the “deep web.” For this reason, it is suggested that a) ICES be able to export digitized records into an open and standard format, such as EAD finding aid, XML, or CSV data, b) ICES has some way to query a web service for the documents available related to a plot and make it available to end users, c) ICES provides a web service that provides the documentation related to plot so that it can be incorporated into open data sets, or d) two databanks of digitized records are maintained and made available to end users (e.g., ICES and finding aids). The last option, providing 2 data banks of documents, could prove logistically challenging (e.g., which one is the authoritative data bank? Did both databanks get updated when X documents were re-digitized?). Thus, while ICES may have great potential, it should be integrated and support open data so that records can be found using tools that researchers normally use (Google, Worldcat, etc.).

To avoid having multiple databases maintaining the same information, additional integration opportunities should be explored. For example, the possibility of integrating the “Burial Inquiry System” with ICES can be explored. Rather than having multiple copies of the same information residing in different places, having a centralizing and authoritative database of this information that can be queried as needed may help streamline operations.

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<sup>35</sup> Diesendruck, L., Marini, L., Kopper, R., Kejriwal, M. & McHenry K. (2012), “A Framework to Access Handwritten Information within Large Digitized Paper Collection,” available at: [https://www.researchgate.net/profile/Rob\\_Kooper/publication/261076804\\_A\\_framework\\_to\\_access\\_handwritten\\_information\\_within\\_large\\_digitized\\_paper\\_collections/links/564c9c2b08ae352ab55a088f.pdf](https://www.researchgate.net/profile/Rob_Kooper/publication/261076804_A_framework_to_access_handwritten_information_within_large_digitized_paper_collections/links/564c9c2b08ae352ab55a088f.pdf)



### *Plan #6 - Making available the object database*

As the objects in the collection are cataloged in PastPerfect, “PastPerfect” online can be used for making available these objects. Employing a “web publish” flag in PastPerfect should be employed so that objects that make sense for being viewable on the web can be separated from those that aren't (e.g., objects with poor metadata or should be deaccessioned per collecting policy). These objects already have images, and most are high-quality, so there is little work needed to re-photograph the objects. Consistency in object records may be needed, and adopting a standard scheme such as CCO (Cataloging Cultural Objects) may make the most sense.<sup>36</sup>

### **Recommended Next Steps**

The recommended next steps is that the cemetery engage in a series of pilots to digitize records, rather than attempt to undertake a massive and very expensive digitization of all records. Proposed next steps would include:

- a) Making available existing finding aids to the public
- b) Prepare records that have already been digitized and make available to the public, such as the surveyor's notebooks.
- c) Make complete open metadata available to the public, such as lists of people buried as the cemetery, so that this information can be discovered via search interfaces like Google.
- d) Engage in a curated digitization project of burial orders and make digitized information available to the public.
- e) Engage in digitization of chronological books. Index books using outsourced indexers or engage in crowdsourcing. Make digitized information available to the public.
- f) Make available select portions of the object database available to the public via the PastPerfect online module.
- g) Roll-out an on-demand digitization program. Link in digitized records into finding aids as they are produced.

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<sup>36</sup> [http://cco.vrafoundation.org/index.php/toolkit/cco\\_pdf\\_version/](http://cco.vrafoundation.org/index.php/toolkit/cco_pdf_version/)

**Green-Wood Cemetery NEH Planning Grant**  
**Digitization Proposal**  
**Julie I. May**

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This report outlines recommendations for digitization, issues surrounding public access to private information, and suggested workflows for Green-Wood Cemetery in support of the National Endowment for the Humanities Planning Grant awarded in 2016.

**Digitization, Prioritization, and Costs**

Green-Wood Cemetery (GWC) received a quote from Backstage Library Works<sup>1</sup> to digitize everything in its holdings at a cost of approximately \$2.5 million. This quote included high fees to convert an area of the office to on-site scanning stations for Backstage staff. Digitizing everything would not be the best solution for GWC. It's important to set priorities for digitization projects:

- The digitization of historically valuable materials for the sake of preservation and to facilitate research remotely and among staff
- Migrate to an electronic method of recording information about interments at Green-Wood
- Digitize materials requested by outside researchers facilitated by the availability of online finding aids.

Record groups that are physically at risk while in active use and updated by hand should be considered a top priority. They include Burial slips, Catalogs of heirship, Lot Books, and the Chronological burial books. Since these are still active records, a relational database is needed prior to digitization. This will force staff to transition to an electronic system and render those paper resources inactive while preserving their physical condition.

A possible workflow for this would be:

1. Transcribe the information from the Chronological burial books, having the most comprehensive data, into a database
2. Send Chronological burial book for digitization
3. After digitization, the physical materials could be stabilized for long-term storage
4. All additions for entries in each book would be entered into the database; entries for other books not yet digitized should still be made by hand in the book itself

Innovative Document Imaging<sup>2</sup> is located in East Brunswick, NJ and is experienced in doing

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<sup>1</sup> <http://www.bslw.com/digitization/>

<sup>2</sup> <http://idiimage.com/>

large-scale digitization using multiple workstations and a large staff to complete work in a short period of time. The total cost to digitize the Chronological burial books is \$3,318.90 and could be completed in approximately four-six weeks. This would improve efficiency greatly by swiftly transitioning toward entering information into one database. This vendor can also

- embed metadata into the files
- create lower-resolution surrogates for access purposes, and
- form consistent file names outlined by GWC.

They also provide on-site services, but given their proximity to New York City, off-site digitization would be advised. The total cost estimated by IDI for digitizing all record groups is \$195,268.80.<sup>3</sup>

GWC also has a high-end Zeutschel book copy scanner<sup>4</sup> that digitizes oversized 2-dimensional works and is designed to digitize multi-page, bound materials like books. GWC staff have used the scanner for multiple digitization projects including, but not limited to:

- Chronological burial books
- Board of Trustees reports
- By-laws and Rules of regulations
- Blueprints
- Catalogs of heirship
- Lot books

This scanner should be used to digitize inactive records requested by GWC staff and/or researchers. They include records such as the Memo files, Board of Trustees reports, Blueprints, individual pages from archival collections such as Founding Documents, 1837-1899 (009-2013), Civil War ledger/journal of Lt. Francis J. Steers, 1853-1862 (019-2014), and Cuyler Family Collection of Photographs and Papers, 1860s-1974 (012-2015). This on-demand digitization, could also follow established file naming conventions, and be attached as digital objects in the collection's ArchivesSpace finding aid for the benefit of all researchers.

#### **Database, Platform, and Metadata**

GWC collection and administrative staff expressed the desire to make data entry electronic so that the information useful to cemetery business and to genealogical research will be more readily accessible and efficiently entered. There are several databases employed by GWC staff that take steps toward this idea but are independent from one another, accessible to some staff but not others, and appropriate for certain types of datasets. The databases that are employed as of 2016 are:

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<sup>3</sup> See Appendix for itemized digitization quote.

<sup>4</sup> <http://www.thecrowleycompany.com/scanners-software/product-types/book-copiers/12002-bookcopy/>

- PastPerfect Museum Software<sup>5</sup>
- Archon<sup>6</sup>
- Integrated Cemetery Enterprise System (ICES)<sup>7</sup>
- Office Admin System
- Orders Program
- Burial Inquiry

No single database or platform will suit all the needs of a unique organization. Therefore, it is realistic that a few databases may be needed to support efficient workflows and provide appropriate functionality at a fundamental level. Also fundamental to a database's functionality is its ability to offer an interoperable data set. The table below illustrates that PastPerfect and Archon metadata can be harvested for ingest into another system and/or exported in order to collaborate with an OAIS-friendly platform<sup>8</sup> while the other others do not have the same capacity.

Software	Data usage	Metadata schema	Export function	Online access capabilities
PastPerfect	Archives, research	Dublin Core	Xml, xls, csv, pdf	Yes
Archon	Archives, research	EAD	Xml, pdf	Yes
Integrated Cemetery Enterprise System (ICES)	Archives, cemetery business, research	Unique to GWC	Unknown, proprietary	Unknown
Office Admin System Orders Program Burial Inquiry	Archives, cemetery business, research	Unique to GWC	Unknown, proprietary	Unknown

The primary concern with the Integrated Cemetery Enterprise System (ICES) is that it was developed by an individual developer and is a proprietary platform. While open source software has been a popular solution for some time, particularly with cultural institutions having limited funds, it is not necessarily the panacea for all institutions. Nevertheless, one of its primary components is that its code is accessible by the public to manipulate the functionality of the software. Another is the understanding that the data creator may eventually want to extricate its data in the direction of another software solution and provides the ability to

<sup>5</sup> <http://museumsoftware.com/>

<sup>6</sup> <http://www.archon.org/>

<sup>7</sup> <http://www.intera.us/index.html>

<sup>8</sup> <http://www.oclc.org/research/publications/library/2000/lavoie-oais.html>

perform that task. ICES contains valuable information that is useful to staff and could be useful to researchers. However, the data is locked in with the platform and any improvements to the software must be completed by one individual, Tavi, instead of a community of developers or a larger developer company. It is assumed that the developer would be reluctant to relinquish control of the software and risk losing clients. GWC staff should make every effort to export the data in ICES so that it may be used in combination with another platform or so that ICES may be replaced with something more public-facing. The same concepts are true for the Office Admin System, Orders Program, and Burial Inquiry built by Huntington Systems. These software modules seem appropriate for cemetery business and helpful to genealogical research but do not have a public access option and therefore limit their value as databases.

In contrast, PastPerfect is also a proprietary software platform but offers the ability to export multiple data formats. GWC could also opt to activate an online catalog that is fully supported and hosted by PastPerfect for online access to records and images representing historical items in the collection. In addition, GWC could export descriptive metadata to the Digital Public Library of America (DPLA)<sup>9</sup> or another aggregator thereby expanding the reach of the collection to a larger audience. Brooklyn Historical Society utilizes PastPerfect to describe photographs, oral history interviews, fine art, artifacts, and archival documents. All descriptive metadata is entered according to a cataloging manual that specifies the content standards to follow and what fields to employ. Those fields correspond to a Dublin Core element and exported as xml as follows:

PastPerfect to Dublin Core data mapping:

DUBLIN CORE	PP photograph record	PP archive record	PP artifact record	PP Works of Art record
title_collection	Collection	Collection	Collection	Collection
title_title	Title	Title	Title	Title
title_accession	Other #	Other #	Other #	Other #
identifier	Object ID	Object ID	Object ID	Object ID
type	Medium	Object Name	Object Name	Medium
publisher	Hard coded "Brooklyn Historical Society"	Hard coded "Brooklyn Historical Society"	Hard coded "Brooklyn Historical Society"	Hard coded "Brooklyn Historical Society"
description	Description	Scope and Content/Abstract	Description	Description

<sup>9</sup> <https://dp.la/>

date	Date	Date	Date	Date
coverage	Year Range	Year Range	Year Range	Year Range
creator	Photographer	Name of creator	Artist	Artist
format	Print size	Extent and Medium of the Unit	Dimension Details	Dimension Details
rights	Copyrights	Conditions Governing Reproduction/Copy right	Legal Status	Legal Status
subject_people	People	People	People	People
subject_subject	Subjects	Subjects	Subjects	Subjects
subject_places	Search Terms	Search Terms	Search Terms	Search Terms
relation_finding aid	Custom: Collection FA Link	Custom: Collection FA Link	Custom: Collection FA Link	Custom: Collection FA Link
relation_image	image file name	image file name	image file name	image file name
relation_attachment	Multimedia Links	Multimedia Links	Multimedia Links	Multimedia Links
language	n/a	Languages/Scripts of Material	n/a	n/a

The xml for one photographic record:

```
<?xml version = "1.0" encoding="Windows-1252" standalone="yes"?>
<data>
<record>
  <title_collection>Eugene L. Armbruster photographs and scrapbooks</title_collection>
  <title_title>[Map of New York City with Native American places and names]</title_title>
  <title_accession>AR C.308</title_accession>
  <identifier>v1974.022.1.004</identifier>
  <type>Scrapbooks</type>
  <publisher>Brooklyn Historical Society</publisher>
  <description>Map of New York City area, primarily Brooklyn, with places and names distinguished with Native American titles. Coastline and rivers sketched with red ink. Water distinguished by blue paint./n/nScrapbook page from "Bushwick and her neighbors, Vol.1"</description>
  <date>1907</date>
  <coverage>1907-1907</coverage>
  <creator>Armbruster, Eugene L., 1865-1943</creator>
  <contributor></contributor>
```

```

<format></format>
<rights>Unrestricted</rights>
<subject_people></ subject_people>
<subject_subject>Na tive Americans</subject_subject>
<subject_subject>Na tive peoples</subject_subject>
<subject_places>Br ooklyn (New York, N.Y.)</subject_places>
<relation_ohms></relation_ohms>

<relation_findingaid>http://dlib.nyu.edu/finding_aids/html/bhs/arc_308_armbruster.html</relation_findingaid>
<rights_request></rights_request>
<relation_image>076\v1974221004.jpg</relation_image>
<relation_attachment>Largeimages1\bhs_v1974.22.1.004_a.jpg</relation_attachment>
<source></source>
<language></language>
<creator_alpha></creator_alpha>
</record>
</data>

```

Another option to explore is to utilize the digital object link in ArchivesSpace once finding aids have been migrated from Archon. While not yet investigated, the xml generated from PastPerfect could theoretically be attached to a file level record in a finding aid. It would be most beneficial to supply the online location of that image using a Digital Asset Management System rather than PastPerfect, but those options could be explored to further limit the number of platforms employed by GWC.

For business and archival records, my recommendation is Filemaker Pro<sup>10</sup> or something like it. It is a relational database that can incorporate out-of-the-box templates such as contacts, invoices, and personnel records while allowing GWC staff to create custom, searchable data sets created with a graphical user interface rather than through a programming language. A number of organization types have used it to catalog their assets as well as complete day-to-day business tasks. GWC could employ it to create a database that represents all the important and relevant information elements and then create forms or screens that would access different sets of that data for different purposes. For example, the following information could be entered independent of specific GWC resources:

- An individual's vital statistics including death date and burial #
- Lot information including dimensions, grave numbers, purchase information, and GIS coordinates

<sup>10</sup> <http://www.filemaker.com/products/filemaker-pro/>

Once entered, a form could be created to mimic that of a Burial order, Chronological volumes, Lot books, and the Catalog of heirship entries without duplicating entry of that information into the database.

Alphabetical Cards	Burial Orders	Catalogs of Heirship	Chronological Volumes	Lot Books
	correspondence		correspondence	
	Miscellaneous documents		Miscellaneous documents	Miscellaneous documents
	inscriptions		inscriptions	
				purchase information
				heirship
lot #	lot #		lot #	
		affidavits		affidavits
			burial #	
name of deceased	name of deceased		name of deceased	
last residence			last residence	
date of interment			date of interment	date of interment
	grave #		grave #	
	birth date		birth date	
birth place	birth place		birth place	
age at death			age at death	
date of death	date of death			
			place of death	
			time of death	
cause of death			cause of death	
name of undertaker			name of undertaker	
	burial permit #			
	plot diagram			
	section #			



	marker information, illustrations			
names of burial diggers				
			Marital status	
	Burial GIS		Burial GIS	
	Section GIS		Section GIS	
Lot GIS	Lot GIS		Lot GIS	

Once entered, the information can be customized to appear in any way that is useful and would combine the resources that overlap unevenly to provide a comprehensive representation data. This would the ability to create reports of that data in a variety of ways, both for answering research questions and for complying with legal information requirements such as number of burials in a given time period, cause of death patterns, or providing affidavit information.

Likewise, it could also be used to record descriptive metadata for artifacts, photographs, fine art, and ephemera. Another table could be created using the Dublin Core metadata schema in place of PastPerfect and attach a photograph. This data could also be exported to an online tool such as the DPLA. In short, Filemaker Pro is adaptable for a number of purposes that could decrease the number of databases employed by CWG to make information accessible in a single place with the option to export it all, parts of it, and in a variety of formats. Filemaker has been in existence since the mid-1980s and well known among many information professionals. CWG staff could take courses through online tutorials or hire a specialist to design the database to useful specifications for the administrative and collection staff needs.

#### **Archon to ArchivesSpace**

GWC has been using Archon, the Simple Archival Information System, to create structured descriptive data of its archival collections represented in approximately 92 finding aids since 2012. However, GWC has not yet taken advantage of the publishing module of the program to make its finding aids accessible to outside researchers. If GWC's goal is to make its collections available to researchers, then finding aids must be available and searchable online. The best method is to publish its finding aids from Archon or to create and publish PDFs of its finding aids.

In the meantime, ArchivesSpace (AS) has supplanted both Archon and Archivists' Toolkit as the open source content management system of choice for the archival industry. GWC could continue using Archon if not for the University of Illinois phasing out its technical support for

the program in favor. While it is possible to continue with Archon, it places GWC's data at risk of data loss or corruption should an error or problem arise with the program. With that in mind, GWC must migrate from Archon to ArchivesSpace.

ArchivesSpace has an active community who can assist in the migration process. GWC is not required to become a member of ArchivesSpace, but there are several benefits, particularly while the program is still in development and to offer ongoing support of its maintenance. By becoming a member of ArchivesSpace, GWC will have access to:

- ArchivesSpace user manual
- Technical support
- Community forums
- Video tutorials
- Serving on the Governance Board, User Advisory Council, or Technical Advisory Council<sup>11</sup>

Members also have the opportunity to request enhancements, improvements, and bug fixes to the program. AS makes the migration tool available through its website for members and non-members alike<sup>12</sup>.

Should GWC choose to perform the migration using institutional staff and AS documentation, they could also utilize the member community directly. Many institutions formerly using Archon have already migrated to ArchivesSpace so that GWC can benefit from the mistakes they made, unexpected issues encountered, and lessons learned in the process. Some institutions have made their documentation available to the community like Yale University, for example. They migrated from Archivists' Toolkit and published a useful step-by-step narrative of their migration process which includes managing time expectations, reviewing error logs and correcting inconsistencies in data input, and recommended tools for checking data integrity<sup>13</sup>. Other resources include:

- The Society of American Archivists Collection Management Tools Roundtable Documentation Portal: <http://www2.archivists.org/groups/collection-management-tools-roundtable/archivespace>
- The Special Collections Research Center in the Earl Gregg Swem Library at the College of William and Mary user manual: <http://scrc.wmwikis.net/ArchivesSpace+User+Manual>; and

<sup>11</sup> <http://archivespace.org/community/member-benefits/>

<sup>12</sup> <http://archivespace.org/using-archivespace/migration-tools-and-data-mapping/>

<sup>13</sup> Migration step by step  
<https://campuspress.yale.edu/yalearchivespace/2015/06/14/migration-step-by-step/>

- Blog posts that document migration such as Rockefeller Archives Center AT to AS migration: <http://blog.rockarch.org/?p=1265>, ArchivesSpace @ Yale: <http://campuspress.yale.edu/yalearchivesspace/>, and Chaos -> Order: <https://icantiemyownshoes.wordpress.com/category/archivesspace/>.

If GWC chooses to hire a migration consultant, there are several companies that provide this service.

- Lyrasis<sup>14</sup>  
LYRASIS partners with member libraries, archives and museums and other cultural heritage organizations to create, access and manage information with an emphasis on digital content, while building and sustaining collaboration, enhancing operations and technology, and increasing buying power.

Lyrasis is the development arm for ArchivesSpace and a registered service provider. Since their developers are directly involved in the program's development, it would be highly recommended to use them for migration services. Their business model and fee schedule includes a hosting and migration package. While you could choose just to host with Lyrasis, repositories must choose a hosting level in order for Lyrasis to migrate a repository's records.

An example of the costs for a migration + hosting package of a large repository (400+ records) is approximately \$12,000 at the commencement of service agreement and an annual renewal cost of approximately \$10,000.

- Atlas Systems  
Atlas Systems is a software development company whose mission is focused on bringing the benefits of automation to library processes that have not been addressed by other software services, Atlas has introduced Ares, an electronic reserves solution, and Aeon, an online request and workflow management system specifically designed for special collections libraries and archives.<sup>15</sup> They are an ArchivesSpace registered service provider with a good reputation and extensive knowledge of library and archives software.

Similar to Lyrasis, they offer a hosting and migration package. However, only existing customers can opt for migration-only services. As of Spring 2016, they were starting to explore other options for migration and hosting separately for new customers.

<sup>14</sup> <https://www.lyrasis.org/about/Pages/default.aspx>

<sup>15</sup> <http://www.atlas-sys.com/about/>

An example of the cost for hosting and support for a medium-sized repository is approximately \$4,500 per year.

- iWise Consulting

iWise Consulting is a privately held company that specializes in providing IT consulting, IT support and web solutions for small- to mid-sized organizations in the New York Tri-State Area.<sup>16</sup> Unlike Lyrasis and Atlas, iWise does not specialize in library and archives software. They are not an ArchivesSpace registered service provider.

Brooklyn Historical Society (BHS) has an ongoing service contract with iWise to provide desktop support, network and systems upgrades and maintenance, and discrete technology projects. In consultation with and direction from BHS collection staff, they configured an Amazon Cloud server to host ArchivesSpace, installed the software and performed BHS's Archivists' Toolkit data backup and executed an ArchivesSpace migration to version 1.4. iWise provided error logs to staff who made corrections and evaluated the integrity of the data in ArchivesSpace. Recently, they performed another successful migration followed by an upgrade to version 1.5.

While the migration performed for BHS was within the ongoing support contract hours, they expressed interest in helping other repositories migrate to ArchivesSpace and would be available for hire at a capacity similar to what they provided for BHS.

Regardless of the method GWC pursues to migrate their finding aids to ArchivesSpace, key staff should familiarize themselves with the software through tutorials available with membership in order to be aware of and included in the cleanup of records and migration activities.

#### **Privacy and Public Access Policy**

Green-Wood Cemetery Archives (GWC) lacks a public research facility to accommodate outside researchers. However, there have been cases when scholars, genealogists, and artists have contacted the GWC in order to schedule an appointment to perform research.

Other than the above, which requires a level of authority and perseverance the general public doesn't necessarily possess, the *Green-ealogy* and *Burial Search* portals provide public access to GWC. *Green-ealogy* is a paid service that includes custom research by request at a rate of \$30/hour. The *Green-ealogy* staff is made up of part-time staff who are usually current or recently graduated students from area library and information science graduate schools. Requests about a person or burial less than 70 years ago is immediately vetoed according to the

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<sup>16</sup> <http://www.iwiseconsulting.com/about/>

current privacy policy. Requests for records older than 70 years are researched using as many of the resources as are relevant including the *Burial Inquiry database*, *Burial files*, *Lot book*, *Catalog of heirship*, *Chronological book*, and *Burial slips*. As with any research, there are no promises that an inquiry will locate the desired information. The *Burial Search* database is the self-serve option that allows the public to enter a name and an approximate date of interment in order to locate the lot, section, and grave number for an individual.

Considering the current options for research, records used by the *Green-ealogy* staff should be included in a formal access policy aligned with the current practice that restricts records for 72 years according to the statute governing the U.S. Census Bureau<sup>17</sup>. The Census Bureau restricts access to personal information in which GWC researchers are keenly interested. GWC makes that information available to researchers when available. Addresses, employment, cause of death, and date of death are examples of information that is already available in other formats such as city directories (aka phone books) or newspaper articles. Therefore, it would be appropriate that this information should have a shorter restriction period and fall under the rule that means pre-1923 published records are public domain and post-1923 published records are restricted. This provides a policy conflict for GWC that should be referred to a lawyer for a closer interpretation of the data as it pertains to the law, but also to establish an institutional policy regarding its level of risk in making personal records available to the public for research purposes. Taking all of the above into consideration, providing access to records created prior to 1923 are a minimal risk. A disclaimer on GWC's website could justify and mitigate any objections to the availability of personal data. A take-down policy might also offer some satisfaction to heirs who want their relatives' information to remain private.

Another issue with a privacy and public access policy is logistical. Since many records are not in original order or include a mix of records from various dates, it would be difficult and time-consuming to separate and restrict access to some materials while making others readily available. In a reading room where appointments to see materials is required, this is more easily accomplished. With a project that includes mass digitization and online access, separating records appears to be difficult and provides an opportunity to make errors in giving access to restricted records. The solution to this problem would be to set priorities for selective digitization.

Making institutional records such as financial records and board minutes available to the public is a decision that should be made by the Green-Wood Cemetery Board of Directors in consultation with the GWC staff. Many private institutions with a similarly long history restrict

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<sup>17</sup> <https://www.census.gov/history/pdf/cff2.pdf>

their records by as few as 10 years or by as many as 50 or 100 years depending on the records themselves.

### Conclusions

Green-Wood has the advantage of being one of the oldest institutions in New York City with a rich history. Not only does this history relate to the cemetery itself, but to the inhabitants of Brooklyn and the other boroughs. Therefore, the overlap between the GWC and other repositories in New York City offer potential collaborations that could be beneficial, cost-saving, and time-saving. For instance, GWC could join a catalog collective such as what is offered by NYU who hosts MARC and EAD finding aid records to their academic audience of researchers. A continuation in the relationship with Brooklyn Historical Society could also be a benefit in terms of joint exhibitions, educational tours, and reference services. As more access to the collections at GWC become available, I'm confident that other repositories would come forward with collaboration propositions.

While I do think making more of the collection available online should be a primary priority, I do not think it will happen so rapidly that it will deter visitors because:

- The cemetery is a tourist destination and the research center can function in tandem with a visit to the grounds,
- There is no justification for every record, resource, archival document to be available online and that will necessitate a visit. It should be a gradual and iterative process of digitization informed by research value, research requests, exhibition or program needs, and for preservation.
- The truly curious will always want to see the items in person, particularly those that are handwritten, and require hands-on investigation.

A final thought or concern is that digitization is costly and will not mitigate the need to hand-key information into a searchable database. Therefore, every opportunity to harvest any data already entered into an electronic database, regardless of its accuracy, should be taken. The paper records that are currently the authority should be physically preserved so they may be used to quality check data when necessary or as part of a systematic project and so the information is not lost before it can be captured. It is recommended to take on making GWC records accessible in discrete chunks or projects so that staff may periodically evaluate the direction taken to accommodate changes in technology and research trends. At the same time, a substantive project to get started is also highly recommended.

**Appendix:**

See attached Innovative Digital Imaging Digitization Quote



**Innovative Document Imaging**

44 W. Ferris St. Suite B  
East Brunswick NJ 08816

Phone: 732-613-7170

Fax: 732-613-2788

[www.idiimage.com](http://www.idiimage.com)

## **Digitization of Green-Wood Cemetery Records**

***Prepared for:***

*Julie May*

*Brooklyn Historical Society*

Managing Director of Library & Archives

11/8/2016

Proposal Prepared By:

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November 8, 2016

Julie May  
Brooklyn Historical Society  
Managing Director of Library and Archives

Julie,

I want to thank you for contacting IDI with the specifications for the digitization project of the Green-Wood Cemetery records. IDI has the experience and expertise to exceed all expectations for you on this project. We fully guarantee our work and promise complete satisfaction. I have enclosed pricing information, procedures, *referrals for Cemetery imaging projects* and information regarding Innovative Document Imaging.

If you have any questions, or if I can be of service in any other way, please do not hesitate to call.

Sincerely,

Marty Tannenbaum

732-613-7170

[martyt@idiimage.com](mailto:martyt@idiimage.com)



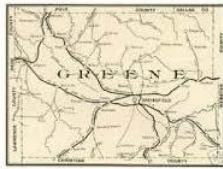
## **Green-Wood Cemetery Scanning Pricing**

### **ALL INCLUDED IN PRICING:**

Includes Pickup and Delivery of records

Includes: 300 PPI Uncompressed Tiff's and accessible JPEG's Grayscale (color if/where applicable),  
External Hard Drive(s) Included.

IDI will provide any information about the records if requested by the customer within 1 hour of request  
either via fax, email or over the phone



Maps



Cards



Books/Ledgers



Overhead Scanners



Card Scanners



Hard Drive

### Pricing for Greenwood Cemetery

RECORD SERIES	FORMAT	OBJECT SIZE	CONDITION	TOTAL OBJECT COUNT	
Alphabetical Cards	Index Card	3" X 5"	Good	510,000 units	510,000 @.06/ image = \$30,600
Annual Care (AC) Account Cards	Index Card	4" X 6"	Good	2,400 units	2,400 @ .06/ image = \$144
Burial Orders	Manuscript/Typescript	5"X8" to 18"x24"	Fair	600,000 units	600,000 @.14/image = \$84,000
Catalogs of Heirship	Bound Ledger	15 3/4" x 21" Open	Fair	6500 units	6,500 @ .49/image = \$3,185
Chronological Volumes	Bound Ledger	30" X 18" Open	Fair	4,810 units	4,810 @ .69/image = \$3,318.90
Cremation Cards	Index Card	4" x 6"	Good	48,000 units	48,000 @.06/ image = \$2,880
Crypt Cards, Alphabetical	Index Card	3" X 5"	Good	5,400 units	5,400 @.06/ image = \$324

Crypt Cards, Numerical	Index Card	3" X 5"	Good	4,300 units	<b>4,300 @.06/ image = \$258</b>
Interment Cards (Lot Cards)	Index Card	4" X 6"	Good	50,400 units	<b>50,400 @.06/ image = \$3,024</b>
Kardex Files	Verical File Cards	5" X 8"	Good	12,240 units	<b>12,240 @.08/ image = \$979.20</b>
Lot Books	Bound Ledger	13" X 22-24" Open (Some volumes only one sided - 13" x 11")	Good	4,000 units	<b>4,000 @ .39/image = \$1,560</b>
Memo Files	Manuscript/Typescript	5"x8" to 8"x12"	Good	103,785 units	<b>103,785 @.09/image = \$9,340.65</b>
Niche Cards, Alphabetical	Index Card	3" X 5"	Good	5,400 cards	<b>5,400 @.06/ image = \$324</b>
Niche Cards, Numerical	Index Card	3' x 5"	Good	6,000 units	<b>6,000 @.06/ image = \$360</b>
Perpetual Care (PC) Account Cards	Index Card	4" x 6"	Good	14,400 units	<b>14,400 @.06/ image = \$864</b>

Public Lot Books	Bound Volumes	Pages: 24" x 17" (one sided)	Good	2,000 pages	2,000 @ .39/image = \$780
Removals	manuscript/Typescript	8.5" x 11" or 8.5" x 14" or smaller	Good	3,800 units	3,800 @ .10/image = \$380
Single Grave Cards, Alphabetical	Index Card	3' x 5"	Good	7,800 units	7,800 @ .06/ image = \$468
Single Grave Cards, Numerical	Index Card	3"x5" to 4"x6"	Good	60,000 Units	60,000 @.06/ image = \$3,600
Single Grave/Public Lot Files (Burial Orders)	Manuscript/Typescript	5"x8" to 8"x12"	Fair	433,455 units	433,455 @.11/image = \$47,680.05
Transfer Books	Ledger	15 3/4" x 21" Open (13.5" x 16" open)	Fair	1400 units	1,400 @ .49/image = \$686
"Lots Conveyed in Trust" Books (Restricted Lots)	Ledger	16" x 19" Open	Fair	300 units	300 @ .49/image = \$147
Urn Site Cards, Alphabetical	Index Card	3"x5"	Good	1,900 Units	1,900 @.06/ image = \$114
Urn Site Cards, Numerical	Index Card	3"x5"	Good	4,200 units	4,200 @.06/image = \$252

				<b>Total</b>	1,892,490 images = \$195,268.80



## **IDI Conversion Referrals**

**Old Montefiore Cemetery-** images of fragile death ledgers, maps, and burial cards

**Montefiore Gardens Cemetery-** images of books, maps, index cards

**Flower Hill Cemetery-** images of death ledgers, maps, and burial index cards

**Christ Church Cemetery-** images of burial maps, plots and oversized maps

**Princeton University-** 4 million images scanned from books

**Yale, Harvard, Columbia and George Washington Universities-** Digitized 8 million pages of the History of Law

**Smithsonian Institute-** History of Air and Space

**New York Historical Society Gilder Lehrman Collection-** Included an original copy of the US Constitution

**Merck Pharmaceutical-** Over 7 million pages of records

**NYU Polytechnic-** 2 million pages of student records

**American Bible Society-** 1 million page conversion including

IDI has done massive conversions for the following Pharmaceutical companies

1. **Bristol Myers Squibb**
2. **Wyeth Pharmaceutical**
3. **Schering Plough**
4. **Amgen Pharmaceutical**
5. **Merck Pharmaceutical**

\*Phone Numbers and Email available upon request\*



### **10 reasons to Contract with Innovative Document Imaging**

1. IDI has been in business 15 years and operates a state of the art conversion facility in East Brunswick, NJ.
2. IDI has met stringent FDA requirements for pharmaceutical conversions.
3. **All IDI employees are required to have background checks.**
4. The driver is an IDI employee and we own our own vehicles for pickups and deliveries. All boxes and or scanning equipment are tracked from pick up scanning stages to delivery.
5. We utilize 62 of the industries newest scanners and software to deliver the best image quality possible.
6. IDI has a record's manager on staff and a past president of AIIM- Association of Imaging and Information Management.
7. IDI is a preferred major corp. vendor and we have **non disclosures in place**. We guarantee all our work.
8. Competitive Pricing
9. IDI maintains backups of all projects until we have sign off from our clients.
10. IDI is trusted with the research and high quality web scanning for the world's largest pharmaceutical companies and publishing companies: including- Cengage Publishing, EBSCO Publishing, Adam Mathews Publishing, Merck, Bristol Myers, Novartis, and Amgen Pharmaceuticals.





## Company Mission

**Innovative Document Imaging (IDI)** maintains a state-of-the-art document conversion facility in East Brunswick, New Jersey. Our company mission is to supply the best service possible at reasonable cost for the digital conversion of paper documents, newspapers, maps, books, bound materials, microfilm and microfiche. IDI balances price, quality, and speed in order provide clients digital assets at the specifications and with the necessary tool to meet their requirements and, where possible, exceed their expectations. In addition to data conversion, IDI prides itself on its ability to go the extra step and fulfill metadata, data archiving, or enterprise content management needs as they arise.

## Innovation

**Innovative Document Imaging's** name directly reflects its approach to serving its clients by focusing on "innovation." IDI is more than a document conversion facility. It is also a reseller of digital equipment and enterprise content management systems that has partner relationships with Canon, Konica-Minolta, Kirtas, Image Graphics, Kodak, Docubase, and Provox; it is also a developer of content management systems for use by libraries and private firms, including its E-File and DigiFindIt systems; and it is an electronic archive backup system for various enterprises. In all of these endeavors, IDI seeks to present a suite of solutions for document imaging, data management and short- and long-term digital storage for its clients. Currently, IDI specializes in serving libraries, publishers, and pharmaceutical companies.

Moreover through partnerships with vendors such as Image Graphics, IDI also supplies the highest-quality microfilm-from-digital images utilizing electron-beam technology, more information about which has been enclosed with this RFP.

## Qualifications, Experience & Capabilities

IDI's operations are currently housed in a 8,000 square-foot facility in East Brunswick, New Jersey. Its staff includes project managers, imaging specialists, and factory-authorized service technicians to ensure that all projects are set up properly, controlled for quality, and completed in a timely manner.

Our staff comprises highly trained professionals familiar with many types of scanning equipment, document and book handling procedures, and project management and data conversion software tools. IDI uses some of the most sophisticated imaging equipment in the world, housing over 34 scanners that can handle anything from loose sheets of varying size to bound books up to four inches thick, from simple bitonals to full-color images of differing resolutions. Our equipment stocks include Canon paper feed scanners, Konica Minolta planetary scanners, Kirtas robotic book scanners, and NextScan microfilm/microfiche scanners. As a consequence, IDI can work from materials of any size, produce digital images in a wide range of resolutions and bit depths, output files in different formats, supply text and metadata files at varying accuracy rates, and even install data management systems to assist with organization and presentation of content.

## **NEH Grant for Green-Wood Cemetery: Digital Team Report**

Created by Zannah Marsh

Updated February 15, 2017

### **INTRODUCTION**

Green-Wood's collection comprises a diversity of rich materials, from burial records and correspondence to objects and artifacts, that illuminate American history and the history of the New York metropolitan area. While the collection has great value to historians and researchers in the humanities, a far larger, public, non-specialist audience might also use and enjoy the collection. Green-Wood is a private institution, but its primary role will likely shift in the coming years from an active burial ground to an historic and cultural institution. As this change occurs, broader public engagement may become more and more important to Green-Wood's success and sustainability.

Ideally, Green-Wood's entire collection would be digitized. However, given the large collection and somewhat limited resources for digitization, making accessible the materials that are most compelling to Green-Wood's public audiences-- and ensuring that usability is maximized by the delivery interface or platform-- may be a viable approach.

Stories allow visitors an immediate entry point into an idea or topic, however complex or nuanced. The depth and variety of Green-Wood's collection allows for both small- and large-scale storytelling. For most visitors, the experience of a unique, authentic historical object, document, or artifact is powerful, and more evocative and memorable than a written description. Such experiences are the reason a visitor will travel to an institution and take the time for a visit. On the web, visuals and media that tell stories and showcase authentic objects generally engage visitors more than the experience of reading text.

Drawing on my background in strategy and design for informal learning in museums and cultural centers, in this report I consider how Green-Wood might engage the general public around the collection. I suggest how subsets of users might meaningfully participate and interact, and I provide examples of digital interfaces that enable engagement and participation.

### **CONSIDERING USERS**

It may be useful to consider two separate, broad user groups: local, on-site users vs. off-site, online users. Depending on Green-Wood's strategy and priorities for public engagement (local vs national or global), any interface or access to the collection may

be geared towards one group or the other, or may be designed to convert a user from one group to the other. For example, an intriguing online experience with the collection might be designed to motivate an online user to make a visit and explore the grounds, and the collection in-person. And a successful on-site experience can encourage in-person visitors to explore an online collection, subscribe to a blog or newsletter, or participate in a discussion as part of an online community, extending their engagement with the institution well beyond the visit.

“Personas” are fictional profiles based on about actual real world users, employed in user-centered design to assess how well a given solution meets the needs of potential users. I’ve imagined three potential, fictional users, and summarized them very briefly below. These personas are based on my understandings of current or potential Greenwood users, from conversations with Green-Wood staff.

*Louise, the novice genealogist*

Louise, a woman in her mid-40s, lives in the Midwest. A recent conversation with an elderly relative sparked curiosity about her family history. An internet searches lead her to a trial account on ancestry.com, and after an hour or so exploring the site, she discovers that a branch of her family lived in Brooklyn in the late 1800s. Louise is seeking information such as where her relatives are buried, when and how they died, information about the physical gravesite, and any other information that can help her feel more connected to her ancestors and the stories of their lives.

*Miguel, the educator*

Miguel, a man in his late 20s, teaches high school history on Long Island. His 10th grade class is covering American history, currently focusing on the Gilded Age. He is looking for online resources to supplement the standard curriculum, which does not include multi-media offerings, and get his students more engaged and excited about this subject. Though he lives about an hour and a half from Green-Wood, he has never visited.

*Michiko, the tourist*

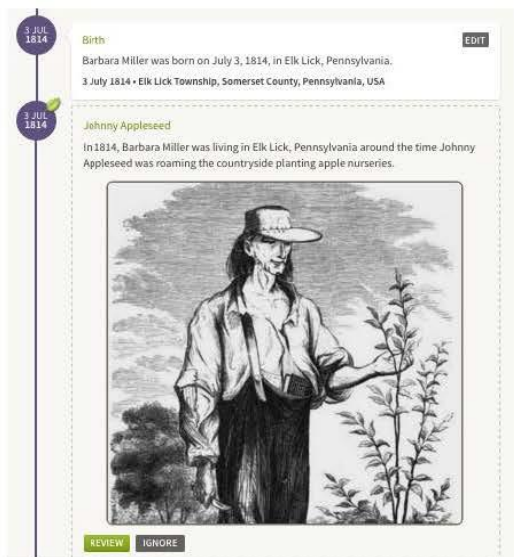
Michiko, a woman in her late 30s, and her family (her husband and teenage daughter, along with her elderly father) are planning a visit from Japan to New York City. Michiko is a history buff, as is her father; her husband is an architect. Her daughter May is an avid photographer. The family has been pouring over guidebooks and searching the web as they create an itinerary for their upcoming New York trip.

Personas like these are used in a kind of thought experiment, to direct the design of an interface or system. For example, if this particular user was going to interact with a certain collection interface, how would they do so? What kind of results would this user obtain, and what might that experience feel like to them? Typically, a program of user research (in-depth, extensive, individual interviews with a groups of real users) would be conducted to inform these personas, but time and geographic limitations prevented me from doing so. Green-Wood staff who have day-to-day in-person or online contact with users and visitors may modify these personas to better reflect their understandings of actual user needs.

In the following section I'll describe a few possible solutions for user engagement with the collection, and consider how some of the personas described above might respond to these solutions. A full design process would involve more carefully researched personas and well-defined "user stories" or short narratives describing a persona's interaction with the solution.

### STORYTELLING & CREATING CONTEXT

One feature of Green-wood's website is the burial search tool. The search function works perfectly, and reliably informs you if someone is buried at Green-Wood, and if so, where. But if the answer is yes, all that's offered is burial date, lot, section, and (if available) grave information. This seems a missed opportunity to use some of Green-Wood's amazing assets to help provide historical context to any burial. If a common motivation in genealogical research is a desire to reconnect with the past, users like Louise (see persona, above) may also be interested in general historical information about time periods in which their ancestors lived.



"[Historical Insights](#)" a feature of the popular genealogy website [Ancestry.com](#), augments subject's timeline with related content. For example, in my own family tree, my third-great-grandmother, Barbara Miller, was born in 1814 in Somerset County, PA; when I view "Historical Insights" on her timeline, I see image and text about the legendary Johnny Appleseed.



Clicking on the “Review” link takes me to [a capsule summary of this historical figure](#) with a few vivid details of settler life and depictions of Pennsylvania at the time. While Johnny Appleseed and my third-great-grandmother are not relations and probably never encountered each other (and I certainly did not request this information) it’s an intriguing story and provides a bit of context for my relative’s life.

A database designed to help make these context connections for users might include a curated, annotated selection of images and scans of collection highlights (and including historian Jeff Richman’s terrific blog posts), sorted by decade or five-year period. According to the burial date of a search result, these context items might be retrieved and offered as an “Explore Historical Context” option to users along with the requested burial data. This feature could provide online searchers with an enticing preview of Green-wood’s varied collection, and prompt future visits.

The burial order files in Green-Wood’s collection offer a glimpse into the life of an individual or family, through basic demographic data and original source correspondence from surviving family members, orders and invoices for headstones, exchanges with Green-Wood staff regarding burial services, and documentation of last wills and estate plans. These documents may convey details about personal health, end-of-life religious and cultural practices, financial circumstances, social status, and family relationships. Taken together, and situated in a historical context, the contents of a small collection can tell a fascinating, human-scale story and help to illuminate a period in history.

The formidable project to create finding aids for these materials is already underway. While finding aids are excellent tools for researchers, they are text-only and don’t do justice to the quality and richness of the materials in the collection. I would recommend selecting a small subset of the orders that contain the most intriguing stories (targeting both famous people and burials related to pivotal historical events), and scanning and annotating each item. Annotation here may be particularly important to non-specialist users who need help interpreting the documents and images. These especially charismatic collections should be highlighted and searchable on Green-wood’s website-- and possibly connected to burial search results, as described above. A dynamically generated shortlist of suggested tags may help users with little archival research experience understand query the interface and the kind of search terms that are effective. Michiko’s family (see persona, above) could search according to interest (architecture, World War II history, photography) and immediately access high quality scans of authentic artifacts and documents. Miguel’s students could explore the annotated records by decade as they work through their unit on the Gilded Age.

## GENEROUS INTERFACES

For the specialist researcher, use of the collection is likely to be focused, aligned with a well-framed research question. A querying a well-designed-database with a specific search term may work quite well for this user. For the member of the general, non-specialist public, motivations for engagement may be more open-ended or vague, less targeted, less task-oriented. For this user offering access to a searchable database, however comprehensive, may not be useful. She may not have a definite search term or name in mind, or may be seeking understanding of a broader historical context that the results of a single query cannot yield.

Mitchell Whitlaw, in his 2015 paper “[Generous Interfaces for Digital Collections](#)” (in Digital Humanities Quarterly, Volume 9, Number 1), posits that “generous” interfaces “provide rich, navigable representations of large digital collections; they invite exploration and support browsing, using overviews to establish context and maintain orientation while revealing detail at multiple scales.” Such interfaces take full advantage of the special visual qualities of authentic artifacts, documents, and artwork, and invite non-specialist users to virtually wander and discover the collection freely.

Examples of interfaces created with these principles in mind include the [Rijkstudio project of the Rijksmuseum in the Netherlands](#), where users are invited to “dive into the collection” and can “explore” as well as search over 500,000 of high-resolution works. Below is an “explore” view of the collection, sorted by theme.

### Now in Rijkstudio

Browse 584,328 works of art and 518,654 Rijkstudio's



Veronica  
RIJKS MUSEUM



Adam van Vianen  
RIJKS MUSEUM



Portrait of Don Ramón Satué  
Francisco de Goya, 1823



Fashion  
Rijkstudio  
2 minutes ago · 67 works



Prints  
Rijkstudio

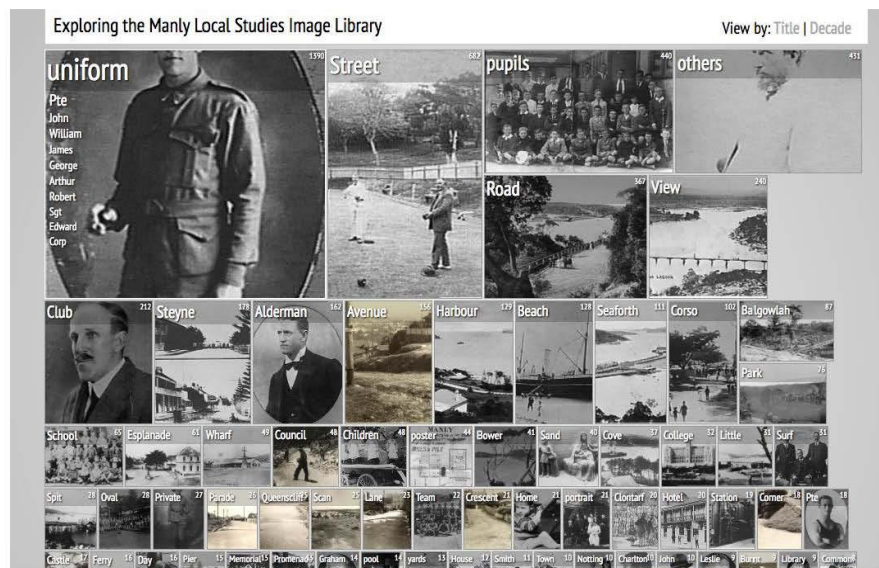
This rich, highly visual, “image-first” presentation lets users see the breadth of the collection. (Rijkstudio is also notable in that users can add images to a personal collection, download them copyright-free, and remix/manipulate them.)

Another generous, image-first interface is [a visualization of the New York Public Library's collection from NYPL Labs](#). This interface displays 187,000 items; users can see these materials sorted by century created, color, collection, and genre. Users see the entire collection as a stunning mosaic. They can roll over any individual item to get a thumbnail view and metadata, and click through to a page with complete information.



[A web interface to the Manly Local Studies Image Library](#) (New South Wales, Australia) displays around 7000 historical images, and has two modes for free exploration: title /keyword or date. Images are grouped into “tiles” according to the mode. The more images in each grouping, the larger the tile. Each tile acts as a mini-slide show, displaying on time-delay each of the images in the grouping. Users can hover to access meta-data for groups and current images. Clicking reveals thumbnails for a full group; users can also select an image to access a full record.





For Michiko and her family (see personas, above) a “generous interface”-- one that shows the range and depth of the collection and allows for interest-based exploration-- could generate excitement about the collection and prompt on-site visit. For Miguel’s students, the striking visuals and the opportunity to freely discover something unexpected and surprising independently could be a transformative learning experience.

If the design and implementation of a “generous interface” is beyond the scope of Green-Wood’s digitization project, a simple feature that enables serendipitous discovery may offer entry points into the collection for those users without well-defined search term. Findagrave.com, a website that amasses burial information from around the world, features a option to “stroll through our online cemetery,” which delivers one of a (very likely curated) [selection of random Memorials to browse](#). Back and forward buttons send the user to the next or previous memorial on this fascinating virtual “stroll”. Users can access this feature in the upper-right corner of most of the sites’ pages, by clicking on a box with a name, date, and photograph of a random subject.

#### OPEN DATA & BIG DATA VISUALIZATION

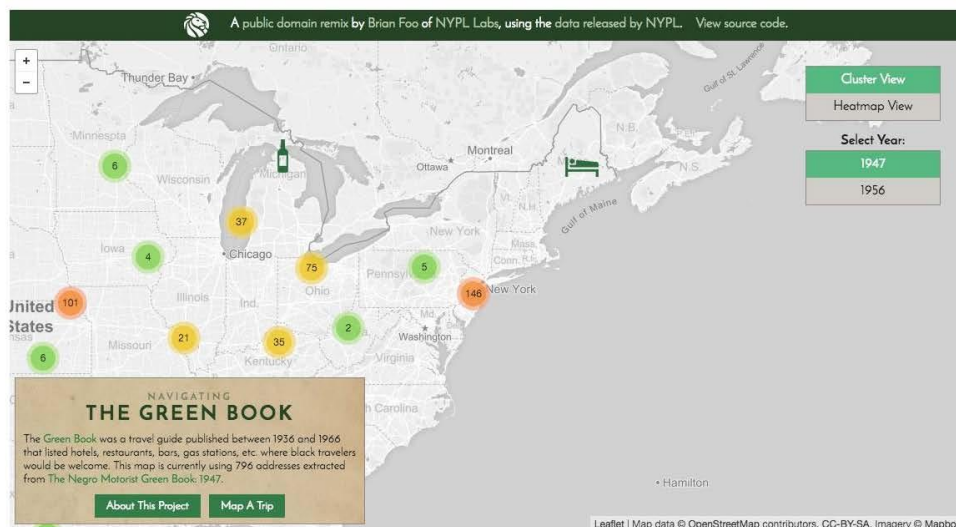
A number of institutions have released their collection metadata on the collaboration, code and data-sharing platform GitHub, among them [MoMA](#), the [Tate](#), and the [NYPL](#).



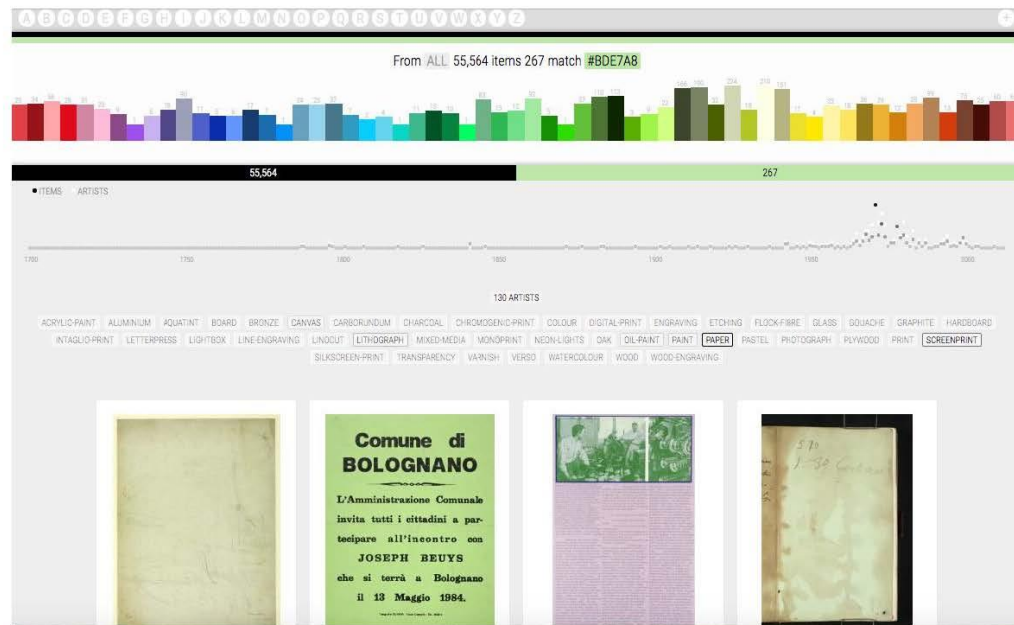
Many institutions are using [Creative Commons licences](#) to dictate the exact terms of use of the materials while encouraging reuse and sharing of these resources. By releasing data in non-proprietary file formats and with DOIs (Digital Object Identifiers) that allow for easy citation, institutions can ensure that data is usable and citable for academic research. A GitHub release of raw data is probably the fastest, easiest way to get data out into the open. Data may also be made available via an Application Programming Interface (API) which allows developers access via querying a database, without releasing raw data files. And data might be published as Linked Open Data, using a machine-readable metadata format to link disparate data sets in a “world wide web of data,” maximizing usability and discoverability through interconnection.

Institutions should be thoughtful about opening data, and abide by any privacy restrictions. But sharing data and metadata enables scholars, students, software developers, artists, and other enthusiasts to do analysis, visualization, and other exciting, creative work that an institution may not have the time or resources to carry out on its own. MoMA opened its data primarily to serve scholars, but invites creative uses of the materials, resulting in a [public, theatrical performance of the data](#). Data visualizations and other data-products generate buzz and direct web traffic (and perhaps foot traffic) to an institution.

Digital data analysis tools and data visualization allow for large data sets (which in raw form are opaque and daunting) to be translated into a powerful, quickly readable “big picture” narratives. Interactive features can enable the exploration of individual records in any visualization. This example, from NYPL Labs, is [an interactive map created from data from the Green Book](#), a travel guide published between 1936 and 1966, listing sites where black travelers would be welcomed and safe.



The Tate's open collection data prompted Geoff Hinchcliffe, a designer, developer, researcher and senior lecturer in Design at the Australian National University, to create [his own interface for the collection](#), which allows users to explore by color, while also evaluating trends over time and by materials.



While opening data certainly doesn't guarantee public usage, [holding events like hackathons](#) and reaching out to digital arts and digital humanities educators can generate exciting and surprising projects. I think the prospect of opening data and visualizing data from Green-Wood's chronological log books is extremely exciting. This data may illuminate sweeping trends and stories concerning race, class, immigration, and public health that have shaped both local history and American history.

## CROWDSOURCING

Online platforms make it possible to break up a huge, daunting task into many small "micro tasks" and distribute them among many users. Wikipedia is a well-known example of "crowdsourcing" content; many users voluntarily contribute to a single online encyclopedic repository of articles. Currently the English version has over five million articles. A more relevant example for Green-Wood is [Findagrave.com](#). The site's design

is rudimentary but boasts a very active membership. According to [Findagrave.com FAQ page](#), there are currently 400,000 contributing members.

Membership on the site is free; members contribute burial data, grave and cemetery photographs, and may request information and photographs from other users. Top single contributors have logged several hundred thousand burials (contributors with upwards of one million burials logged may be gaming the system in some way). The site allows for commenting and discussion on records, and in community forums. Both Wikipedia and Findagrave.com have well-defined processes for submitting content, and systems for correcting and removing incorrect submissions. Users may review submissions of fellow users. Tutorials and FAQs help instruct users on technique.

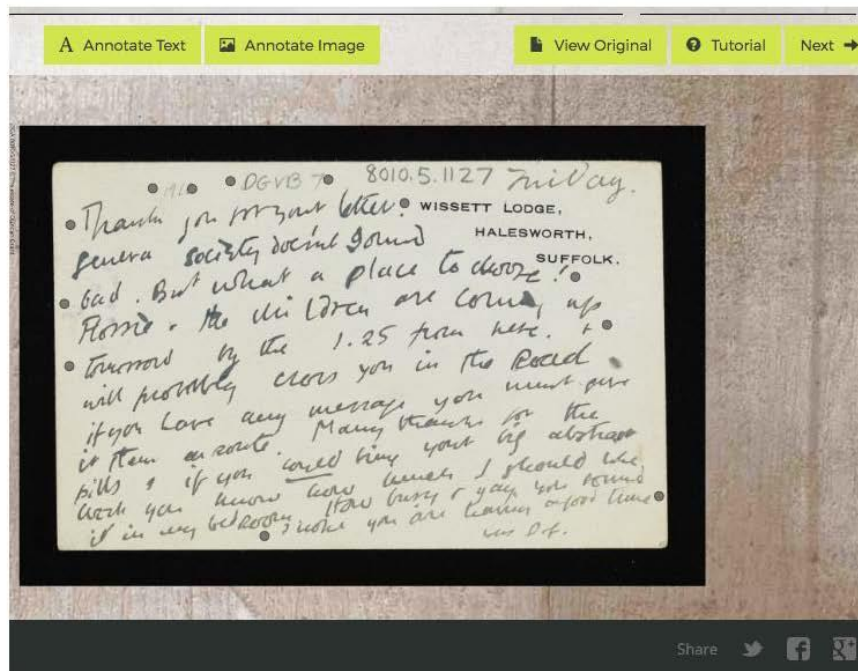
Memorials (the name for a Findagrave burial record) may include photographs of the deceased, scans of documents, photographs of the grave markers, and biographical information. “Management” of Memorials may be transferred from user to user. Users can also leave digital “flowers” and “notes” at memorials. Findagrave.com was purchased by Ancestry.com in 2013; contributors own copyright of any original content submitted to Findagrave.com, but the company is the licensed distributor of all content uploaded to its site.

The Findagrave.com example indicates that there is a relatively large audience willing to take on “micro tasks” related to burial information. Green-wood might look to this example in considering ways to expand its community of active, enthusiastic members. Creating a “photo challenge” event where visitors are encouraged to photograph a certain area of the cemetery, or search for a certain kind of burial (much like the Civil War Veteran research project coordinated by Jeff Richman), could generate excitement and increase attendance. A database or digital platform that allowed users to upload photographic content related to monuments would expand Green-wood's documentation of burials and memorials. A photography crowdsourcing challenge might entice Michiko's daughter, the photography enthusiast May, to add a visit to the cemetery to the family's itinerary. Augmenting the data returned by Green-wood's Find a Burial search with a photograph of the gravesite would provide Louise, the off-site novice genealogist with a more tangible connection to her relatives.

Another example of crowdsourcing is the website [Zooniverse](#), a “platform for people-powered research.” Professional researchers or institutions upload artifacts (from images of distant galaxies to scans of literary correspondence) to the Zooniverse platform, which enables any user to participate in research by answering some basic questions or in some way evaluating the artifacts. Crowdsourcing these micro-tasks



potentially accelerates the speed of discovery. As “citizen scientists,” users shift out of a passive “viewer” role and may deepen their relationship with the topic, and potentially, with the institution sponsoring the project. Zooniverse results are improved by having multiple users review each artifact, to detect conflicting results that may indicate an invalid analysis. A relevant project hosted on Zooniverse is [AnnoTate](#), created by the Tate Museum in London to involve online audiences in the transcription of artists’ sketchbooks.



Other projects, such as the Imperial War Museum’s [Operation War Diary](#) do not involve transcription, but instead ask users to generate metadata by tagging or classify documents. The appeal of Zooniverse projects is the opportunity to interact with research artifacts that most users would never encounter in their everyday lives.

Scans of the Green-Wood’s chronological burial books might be good candidates for a crowdsourcing project. Of the proposed personas, Miguel might introduce a transcription activity around the chrono books to his history students, as a way of starting a discussion about life (and death) in the Gilded Age.

## COMMENTS ON CURRENT PLATFORMS

As I am not trained as an archivist, I am not well versed in the pros and cons of different digital archiving systems for this collection (other members of the Digital Team offer that expertise). ICES (Integrated Cemetery Enterprise System) seems to be exceptionally useful for managing the burial operations at Green-Wood, however, I am skeptical that it is an appropriate public interface for the collection. It seems (from the time I spent using it, and from the demonstrations I saw) that the interface may be too complex, and the software architecture too specialized or closed to support the development of a truly user-friendly interface. But integrating Green-Wood's various databases into one single system is certainly advisable, to avoid having to update and maintain a number of separate databases.

## RECOMMENDATIONS

- Carry out a user research program to gain a deeper understanding of what potential non-specialist users want from a digital collection, and what their motivations might be in using the collection
- Consider an "image-first" web-based interface for the collection that enables exploration as well as search; feature the collection front-and-center on the Green-Wood web page.
- Consider digitizing highlights of the collection, with a focus on stories and charismatic artifacts, artworks, documents; link these to burial search results.
- Consider creating a Zooniverse project for transcriptions of scans of the Chronological burial books.
- Consider a release of collection metadata under a Creative Commons license, and invite research, software development, and creative communities to use it.

## LINKS AND REFERENCES

### Description of Ancestry.com's Historical Insights:

<https://support.ancestry.com/s/article/ka215000000TyICAA0/Working-with-the-LifeStory-Feature-on-Ancestry-1460088593707#res6>

### Johnny Appleseed on Ancestry.com:

<http://www.ancestry.com/contextux/historicalinsights/johnny-appleseed/persons/270056960017:1030:107027087>

### Generous Interfaces for Digital Collections:

<http://www.digitalhumanities.org/dhq/vol/9/1/000205/000205.html>

**Rijkstudio:** <https://www.rijksmuseum.nl/en>

**NYPL Lab's Visualization:** <http://publicdomain.nypl.org/pd-visualization/>

**Manly Local Studies Image Library:** <http://mtchl.net/manlyimages/explore.html#title>

**Findagrave.com “Stroll”:**

**MOMA on GitHub:**

**Tate on GitHub:**

**NYPL on GitHub:**

**Creative Commons Licensing:**

**MoMA blog post on data release:**

**NYPL’s Green Book Map:**

**Tate Explorer:**

**SF MoMA Participatory Design Hackathons:**

**Findagrave.com:**

**Findagrave.com FAQ page:**

**Zooniverse:**

**AnnoTate:**

**Operation War Diary:**

**THOMAS KESSNER**  
**REPORT ON THE GREEN-WOOD COLLECTIONS**  
**FOR THE GREENWOOD HISTORIC TRUST**  
**September, 2016**

The GreenWood collections are unique and substantial and I offer below a number of different possibilities for research that involve several disciplines including history, sociology, cultural studies, urban life, public health, landscape architecture, business, environment, to name some of the more obvious areas.

Here are responses to the specific questions that formed our charge:

- 1. What potential projects, themes or areas of research can you envision for these records? (We hope this list will be long.)**
- 2. What kind of information can be gleaned from these records? What are potential avenues of research?**

**Early history:**

- The history of land transfers as the city of Brooklyn moves from its rural stage to a more urban setting; from the large Dutch era holdings to the less concentrated holdings of the mid 19<sup>th</sup> century city
- The press of population and commerce in cities make urban burial spaces impractical and promoted the growth of rural cemeteries like GW. A number of the documents in the collection offer perspective on how growing cities began to restrict in-town church burials. Other documents trace the rise of rural cemeteries.
- Who were the figures who undertook the task of making GW – were they drawn from business, from other fields: merchants, clerics, farmers? We see from the documents that they did not want the grounds to have a particular sectarian identity- yet they did sell aggregated properties to churches to raise money. What was the religious character of the founders and their goals in this regard (there is reference in some of the papers to a skeptical attitude toward “superstition”)?
- The documented process (through the Trustee papers and the early history documents) offers a revealing glimpse into early institutional development of public corporations.

These were limited businesses that offered explicit public use and benefit– how did this apply in Greenwood’s case? Uses and applications of the public Corporation laws; Incorporation involved legislative approval- how did GW go about this ; how was the money raised for this very large undertaking?

- Why did GW develop a corporate structure as a joint stock company; and how did it go about selling bonds? By-laws of the corporation offer a good portrait of an early public corporation.
- “Special Collections” includes committee reports and studies of other rural cemeteries that detail the development of these cemeteries, the impact of urban growth on burial practices and choices, and on the planning that scaffolded such large undertakings. The systematic collection of data on such places as Mt. Auburn, Laurel Hill, New Haven, Green Mount, Harmony Grove offers insight into the issues both urban and rural that were considered in developing GW.
- It is possible to trace an evolving plan for administering the public/private project that GW became; setting rules and common practices; establishing an aesthetic that takes into consideration tradition but also allows for change and rejects the imposition of an exclusive religious formula.
- Evolution of rules and procedures for the treatment of the dead and the rights of their beneficiaries. Through by- laws, trustee notes and printed rules it is possible to follow the rules and recommendations (though most of the rules remain unchanged there are always additions as well as updated lists of the plot holders). These collections reveal attitudes and practices regarding death, burial, monuments, eulogizing inscriptions, etc.; and characteristically, discussions about taste and best practices. Just for example, an 1844 set of rules includes a discussion on monument inscription styles going back to antiquity and offers animadversions on the trend toward unwelcome ostentation.
- In these first years as Greenwood laid out its landscape what were the challenges and responses to this major engineering project of clearing the land and preparing it for its ultimate use? What was the plan? How did it develop? What models did they follow?
- GW becomes a place of resort as well as a place for ultimate repose. At what point and how consciously did the trustees GW as something more than a place for the repose of the dead; as a setting for walks, horse carriage drives, respite-recreation etc. How did this come about? Were there reservations about sharing a burial grounds with those



seeking recreation? Was this a conscious plan among the Best Men of Brooklyn to make GW a resource for the living?

- It is widely assumed that GW was a model for Central Park. What was the impact of the GW example on Central Park? Was there any contact between Olmsted and Vaux and the people of GW before the plan for Central Park?
- Olmsted and Vaux's Central Park became a Greensward insertion into the NY Grid- how did the GW layout fit with Brooklyn's land use plan? How were the various properties consolidated into a single expanse?
- GW in-house historian, Jeffrey I. Richman has conducted research on various categories of GW residents running from Civil War veterans (5,000 plus, including generals and some Confederate soldiers) to baseball players and artists. In the course of this work he has gathered primary documents, including letters and diaries that tell us about the experience of Brooklyn natives or many from elsewhere whose trek to this famous resting grounds constitute a story on its own. These documents offer opportunities for research on a wide number of themes.
- Rare Works by Nehemiah Cleaveland, (1796-1877) offer early glimpses of Greenwood, including discussions of various other groups- Firemen, Soldiers, Germans etc.- buried there.
- Henry E. Pierrepont papers, including some of the father's (Hezekiah B.) papers, offer documentary background on the development of Brooklyn in general as well as GW cemetery. They also include trustee discussions about decisions taken regarding the establishment of the cemetery, 1839-40.

#### **Correspondence and Chrono Books:**

- Burial practices. There were frequent disinterments- even for example to bring in the most famous of its early occupants De Witt Clinton. Later we see the dead being moved from GW to Arlington or to other graves.
- The Clinton saga is a story itself about how the founders reckoned that they needed something to bring GW to the attention of the populace and reburying Clinton there would bring pomp, circumstance and attention. Interesting insight into the sharp practices of early NY business folk even on the Brooklyn side.

- Other burial related matters: 1. Though not common in the 1800s, there were cremations even then; 2. Burial conventions re: who gets buried with whom (e.g. married woman with husband or parents; child of divorced parents); 3. Disinterment practices; 4. What kinds of special instructions were given with regard to treatment of the dead, and did they differ by class, by ethnic group, by religion? 5. The use of above ground sarcophagi, various types of markers (religious, secular, family crests etc.). 6. Trace evolving family practices (within a specific family or group of families) over a longer period as different generations are interred or cremated.
- There is a broad range of correspondence from merchants and business folk, whose families apparently made up a significant portion of GWs trade. The business stationery includes hundreds of different letterheads that reflect the range of businesses in Brooklyn. The letterheads often briefly describe the business, its address and at times go into detail about the business or institution (e.g. Letterheads from charitable and other welfare institutions not only give us their boards of directors but also offer a short description of their mission; e.g., letterhead from Actor's Fund spells out what it does for retired actors).
- Based on addresses of the businesses and change over time (traced in Directories) can trace rise and development of different industries and service businesses as well as the changing industrial sectors of Brooklyn.
- Also hotel letterheads allow us to learn about the rise of that industry in Brooklyn.
- Interspersed in the Correspondence files are threads of historical importance, e.g., the War Board during WWII asking the cemetery to cut down all excess metal fences and to encourage families to donate metal from their plots for the war efforts; another example is regarding the reporting requirements for the burial of infants, stillborns etc.
- The fetishization of death with statues, memorials and increasing or decreasing expenditure on mausoleums etc. to bring conspicuousness into the burial and memorialization business.
- The art of death: statuary, poetry, unique designs.
- Research possibilities for these last two items are enhanced with the new collection of the papers and records of William Pitbladdo (a monument maker) that fell to GW when

it purchased the Weir Greenhouse and the adjoining property of the Brooklyn Monument Company to build a new exhibition gallery, library, archive, etc. The collection has files from the 1950s and 1960s full of orders for monuments—with sketches. In addition there is an order book (ca. 120 pages) that covers the period 1856-1867. Its hundreds of orders range in value and design

### **Public Issues:**

- Evolution of landscape architecture
- Evolution of burial practices. For example the increasing use of cremation. With 45,000 plus cremation cards it is possible to carry out a study correlating cremation practices with religion, ethnicity, class, gender; another set of possible correlations: monument/mausoleum styles.
- Interestingly, there is no running record of burial related city laws and codes regarding such things as depth of burial, need to keep away from water, closeness to public access streets, need to protect against vermin and rodents and practices for treating remains. Perhaps there was no oversight beyond the reports they had to file as a corp. Today the state has a 75 page (62,500 words) set of rules
- The files include examples of the expansion of burial related regulations. They also include many clippings and files on hearings before the State Senate Committee as well as investigations of complaints re: the cavalier treatment of the dead; re: the decorum of workers; re: the fiduciary responsibility of trustees
- Provisions for welcoming and treating the public who used the grounds for recreation.
- Addressing ecological issues: sewers, rodents, fears of contamination of water from diseased corpses
- Apparently there was a colored people's section in the cemetery (not necessarily a reflection of GW policy but rather of its clients e.g., church lots). How did race issues play out with regard to this cemetery? Did Trustees address it?
- By carefully studying death concentrations and causes of death research can reveal when there were outbreaks of disease or harsh winters or stifling summers and pursue city records to see how officials dealt with this.

- A number of assorted collections of varied quality and number like Pierrepont, Tilyou, Ebb and lesser known figures like John Genin and Ken Taylor- none sufficient for in-depth work on the individual- but certainly are useful in shedding light on Brooklyn in different eras.

### **Mortality and Vital Statistics (Chrono Books)**

- The dominion of disease: death and plagues waves of specific diseases and their effects on death rates of different ages.
- Correlate place of birth with age of death/ specific diseases/
- Correlate ages with cause of death, e.g. do high % of babies (under 1 year old) die from congestion of lungs
- Catalogue types of diseases and their prevalence and changing patterns in disease over the years; correlate with residence
- Correlate infant mortality with nationality; trace its decline
- Correlate life expectancy with class (to be determined by type of burial) and nationality
- Correlate frequency of suicides with nationality/ class/ time of year/ residence
- Correlate life expectancy with neighborhood
- Frequency of stillbirths/ of infant mortality
- Correlate cause of death with different age groups: People at ages 10- 20 primarily died from; 20-30 primarily died from; etc.
- Kinds of diseases that prevail in the 1870s, 1890s, 1910s etc.
- What were principal causes of death? How frequent “shot to death”, suicide, died of child birth? There is cancer in 1870s but infrequent cause of death what were the most prevalent causes in which eras? Many different causes are mentioned but their intensity changes over time, e.g., diphtheria, dropsy, Bright’s, Phthisis, marasmus,

consumption, softening of the brain, scarlet fever, croup, typhoid, diphtheria, cholera, cancer, etc.

- While life expectancy was materially shorter than today we see from the records that this does not mean there were no old people. There were many more deaths of the very young. Can a study determine mean ages of death for those who survived their first year (of course this can be done with city records as well).
- Process of inheritance and various practices as reflected in the Transfer books. Different by ethnicity? Class?
- The Public Lot books (2,000 pages) that deal with the less prominent and less prosperous of GW's dead show that there were divisions for children, adults and "colored". Info here can be used together with Directory info and census info to build a picture evolving NY's population
- Treatment of the indigent?
- There are distinct records for sports figures. One interesting line of inquiry: did their age at death match the general population? Did they die younger or older? Were there specific causes that were more common among them?

## **Wills**

- Mostly related to the question of inadequate provisions for Perpetual Care and the renunciation of partial amounts. Also regarding the passing of lots to others.

## **Art and Artifacts**

- At present the collection of art and artifacts is unsystematic. The collections represent intriguing and smart choices. Later in this report I discuss some ideas regarding the art and artifacts collection.

## **3. What will Green-Wood need to do to make these records known to the research and academic communities?**

- It will be important to send out announcements to the various academic journals in the disciplines mentioned at the beginning of this report.

- Even more important, it is wise to inform professors who mentor graduate students. They are always interested in the availability of new sources that can be mined by the students for Masters and PhD work. This is especially true for graduate mentors in this metropolitan area.
- Of course, it will help to design a news release with hints of the piquant items to be found in the records to whet the appetite of researchers, but then GW has a very good record of reaching out to the press.

#### **4. What trends or patterns in the data may be of interest?**

- Much of this is covered in the answers to nos. 1 and 2 above, but to name some general areas where patterns will be of interest: public health, mortality, disease, class, Brooklyn's population, ethnicity, city growth, cultural patterns, practices related to burial rituals.

#### **5. How could Green-Wood improve the way we arrange and present our materials so that they may best be used by researchers?**

- As GW takes on a larger public mission it needs to develop a set of policies and guidelines that begin with a mission statement regarding its projected role. This mission statement should consider the relationship between this new expanded function and its historical responsibilities. How do the two relate to each other? What are the new parameters of the mission? How public is GW prepared to be? How will funding be arranged into the future? Is there a possibility for a partnership with the City or some subvention in return for this kind of role?
- With regard to research and researchers there are many models that can be used for either broad or limited access to the collections. Is it necessary for researchers to handle the documents or can much of this be made available in digital form? How much can be digitized? Questions of resources, money and how open do you want to be in providing access to these papers?
- Given the present situation and status of the materials and the number of personnel only a very limited number of researchers can be accommodated. The issue is not so much to improve the way GW presently has its materials as to decide if it is in a position to invite more research on site. If not then the only way to go is digital with a severely limited number who could be allowed to do on-site work.

#### **6. Is there anything we can do to improve our intellectual and environmental controls over the materials?**

- Space for accessible storage and to make the papers available
- Accommodate researchers with work space etc.
- Finder's aids, collection guides, proposed topics for research,
- Allocate personnel resources to working with researchers

**7. Consider issues of privacy and public access; what sort of Privacy Policy would you recommend?**

- Adopt the policies used by the US Census for outside researchers- I think 70 years. Where things are not clear cut because the records are ongoing, either restrict those papers or require permission from the responsible parties
- for family etc. you probably already have access policies

**8. What larger ideas or concepts come to mind when pondering Green-Wood's future?**

**9. What unique qualities or advantages does Green-Wood have over other institutions?**

GW has reached a turning point. It has evolved willy-nilly from a cemetery to a semi public space. Over the years it has collected art, put on exhibitions and various public programs and archived unique records and documents. Its unparalleled space and scale and history keep opening more and more possibilities. And now it is time for taking a more comprehensive approach.

The Museum of the City of New York is about to open its massively funded Core Exhibit on the history of New York. It is a marvelous piece of work, representing much effort on the part of the Museum's staff and many consultant specialists. One of the most difficult issues in the end was the limitations imposed by space. I recall a conversation as part of the team that planned the Ellis Island Museum where for a brief moment there was a question of exhibiting a ship (or part of one). The plan was dropped in part because of space considerations. I say all this for two reasons.

1. Brooklyn has a very important history that is not being told or exhibited. There is a Brooklyn Museum but it does not aspire to be a historical Museum. Tourists, schoolchildren, New Yorkers would all be attracted by a tableau on Brooklyn's History.

2. GW has space, marvelous, unique, attractive space. If the open spaces were used with imagination and audacity GW is capable of exhibiting items on a scale that would be truly extraordinary.

Green-Wood has more than 560,000 permanent residents, including Leonard Bernstein, Boss Tweed, Charles Ebbets, Jean-Michel Basquiat, Louis Comfort Tiffany, Horace Greeley, baseball legends, politicians, artists, entertainers, inventors, and Civil War generals. In the aggregate you have here a very important representation of Brooklyn history. (Of course it is more: NY history, urban history, American history) and no one else appears prepared to tell it- and it is not only the people buried here; it is the grounds, the landscape, the commitment to gathering historically significant materials that put you in a unique position to offer this history.

Nor is this so radical a departure from GW's original mission. With half a million Brooklynites and others interred here there is every reason to create a context not only for their deaths but even more for the lives they lived and their enduring influence. You have already moved in that direction by collecting art, hoping to tell the story of the artists interred here through their work; but that goes only part way. There are so many others both famous and common whose stories represent the history of this city/borough.

Moreover, despite its rich collection of art and eclectic assortment of artifacts, the story they can tell is hiding in storage. This is not the place to go into great detail so I will just suggest that a systematic set of themes for telling the story of Brooklyn through the lives of the many who lived and died here can be compelling and unique. It would also impose a discipline on the collection process.

The larger theme that I would aim for is the history of Brooklyn with elements that are organically linked to GW. But given the spectacular grounds it would be a shame to create only a conventional indoor Museum. This could also be a uniquely designed Museum spread out on this spectacular grounds, dispersed among the various burial sites: so that a political exhibit could go near the Tweed mausoleum; a sports exhibit near Charles Ebbets; etc.

Potential Themes:

- The People of Brooklyn
- Ritual in Life and Death; the Sacralization of death, Wakes and Celebrations of Life, Earnest Mourning, Gravesite eulogies; tombstones and monument art
- Public Health, Healing, Medicine, Hospitals
- Transitions: Passing on Wealth, Beliefs, Rituals, Artifacts, Death Practices from Generation to Generation



- Wills: Family Dynamics; Testamentary Wills, Ethical Wills, Changing Styles in Wills in instructions, patterns of distribution, different treatment of sons and daughters; Disease, Epidemics, Wars, Pestilence; defeating the scourge of infant mortality;
- An exhibit focused on crime and policing in Brooklyn can be built around the police and crime figures interred here; Prohibition, drugs, organized crime in the boro and in the city
- the treatment of aging over 150 years;
- The history of parks and greenswards in cities. The urban yearning for rural respite. A model for the urban park system (Central Park, Prospect Park) in the 1850s and 1860s
- aspects of the Brooklyn economy focusing on the occupations, professions, businesses run by Greenwood's occupants; Brooklyn's business history- farms, sugar monopoly, home production etc.
- the living culture of the various groups represented here
- Around political figures buried here tell the story of the city's politics and Brooklyn's ultimate consolidation into Greater NYC
- Building the bridge (a possible focus: those who died building it)
- Sports and Brooklyn

This kind of initiative would "open" the space to schoolchildren, tourists and New Yorkers and it would lead to a new departure for GW. Moreover, the idea of a research section with an attached Museum could perhaps be built into an ambitious development plan. The US presidential libraries have both, and might serve as a model. This makes more sense to me than the hit or miss approach to collecting some art and some artifacts and displaying them sporadically.

In fact the substantial art collection can frame an exhibit on art and culture in Brooklyn – not as Brooklyn in the shadow of Manhattan, but in its own right. This investment will not only add intellectual value to the art and artifact collection it will enhance its monetary value as well. By linking the art to its role in history and giving it a prominence that it is presently denied this approach would give the art a rich historical setting both for the artists (their lives and in some cases their spectacular deaths) and for the artistic modes, subjects and treatment of issues in the art itself. Topics like Brooklyn Bridge, life defined by class, gender conventions and anti-conventions, race, stereotypes, crime, family life, urban themes, politics (high and low), socially conscious art vs. anodyne themes of conventional interests. Art as decoration; art as display of achievement and mastery; art as social conscience; as protest and freedom of expression.

More elegantly, the art collection can serve as the wrapper, linking the Brooklyn narrative from era to era; or alternatively set the stage for themes to be exhibited and interpreted.

David Rosner

## Final Report and Recommendations to the Green-Wood Historic Fund

Thanks for the opportunity to visit and learn about the incredible collection of cemetery records you have here at Green-wood. As I remarked on one of my visits, I wish I knew of these materials when I was writing my book A Once Charitable enterprise: Hospitals and Health Care in Brooklyn and New York many years ago. As I went through a sampling of your burial records as well as the massive amount of materials related to the origins of the Cemetery I could not help but muse on the ways various portions of my own work would have been influenced. As you may know I tried to focus my book on the social history of health and healthcare in the expanding city of Brooklyn in the decades immediately before and after its incorporation into New York. In short I saw the history of health and disease as a reflection of the urban changes overtaking both cities during a time of enormous social change. For Brooklyn, it was a time when the “City of Churches and Homes,” as it was called in the mid-nineteenth century became the industrial city that it was during most of the twentieth century – when the focus of Brooklyn life moved from Henry Beecher’s Pilgrim’s Church to the Domino sugar factory, the Brooklyn Navy Yard, and the host of different industrial concerns that lined the shoreline between Greenpoint and Gravesend. The decades between the Civil War and the 1940s saw the city expanded and changed both demographically and geographically. And older Protestant populations of English speakers became a more diverse culture of immigrants, Catholics, Jews, African Americans.

Obviously, this is all well known story and I apologize for I know you now this story even better than I do. But, for me as a historian of medicine and public health, this understanding was critical for how I conceived of my book on the development of the hospital system and the services that developed in both Brooklyn and New York. It was also important for it was how I conceived of my book as a study that reflected a broader process of development of the nation’s health care system as it moved from a charitable system built around local needs into a national story of the transformation of health care. It is also how I conceive of what is possible with the records I saw during my visits to Green-wood.

I’ll start at Green-wood itself and work outward. The general story of the development of the rural/bucolic cemetery movement is relatively well-known and has been told in a number of fine secondary works by a variety of authors, virtually all of which you know better than I. Green-wood is clearly identified as part of that broad story that begins with European cemeteries and moves to Mt Auburn and elsewhere.<sup>37</sup>

But it is interesting that virtually all of the future major cities both in Europe and the U.S. engaged in this process of cemetery building. It seems that cemeteries played a significant role

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<sup>37</sup> Nehemiah Cleaveland, Green-Wood Cemetery: A History of The Institution from 1838 to 1864, (New York: Anderson and Archer, 1866); Exposition of the Plan and Objects of the Green-Wood Cemetery, (New York: Narine & Co., 1839).

in marking the importance of the city. How Green-wood's founding played into that larger project of building the port of New York as an national and international site is an obvious project that your records, in conjunction with the records available at the Municipal Archives, Wagner Archives at LaGuardia and other public sources, could really illuminate.

Another obvious project could be to use the very early land deeds as a way of plotting out the development of Brooklyn in the mid and later 19<sup>th</sup> century. While we have some general statements that speak of how cities developed, in fact there is relatively few studies that painstakingly give a picture of the ways land developed. I kept thinking of the big books on the development of Boston, New York and Chicago and thinking about how differently I would have read those books if I had really seen the details available in the deeds themselves. Cronin's history of Chicago, for example, posits that the transformation of the environment was a central aspect of Chicago's and by implication, urban development. Yet, I never really understood the enormity of engineering, for example, the reversal of the flow of the Chicago River, or the raising of an entire community above the flood plain! These records can be used in a very concrete way to show how the cemetery's land was marked off by streams, chains, large rocks and other landmarks tell of the rugged landscape of 1849s Brooklyn with detail that is usually not captured in the general statements about the emerging city. From what I've seen the general descriptions of the land as written in existing secondary works briefly describe the panoramic views from the cemetery, "the highest point in Kings," of the harbor and distant communities. But, these deeds give early descriptions of measuring distance by chain links, pacing the outlines of the cemetery through streams, over rocks and past pastures gives the modern reader a means of really grasping the once-distant cemetery as it was laid out in a rural environment, soon to be overtaken by a rapidly growing city. In these records are descriptions of the laying of roads, the building of drainage systems, the development of pipes for the delivery of water, the development of the BMT, the IND and other public transportation in a way that most historians only provide in broad strokes (i.e. "the city grew," expanded, etc.). Even the history of the subway system which lays out how 722 miles of track rarely gets across what costs in human labor and planning that building entailed to a degree that we should all appreciate.

This very general historical description of the expanding geography raises other more interesting questions about death and dying in the city of Brooklyn and New York more generally. I don't want to seem crass or unfeeling but Green-wood was obviously a part of the more general "commercialization" of death in the city. Of course, there is a wealth of info here on the growth of this "industry." This wasn't only the "buying" and "selling" of family or individual plots but also in the creation of an ongoing set of industries that carved stone, brought bodies back and forth, held services for the departed, advertised those being buried in newspaper obits, and the like. Even walking around the outside gates of the cemetery you see how many tombstone factories, etc. populated the area. Reading the correspondence in the burial plot records you also can see through the letterheads the enormity of the granite stone industry, funeral parlors and the like. Certainly, the rural cemetery movement was more than cultural history alone.

From a purely “history of public health” point of view there are a myriad of possible research questions that emerge from my brief meander through your vast collections. Of course, the wealth of data collected in the records is fascinating. Age, “cause” of death, addresses, nativity, etc. allows for a field-day of questions and historical issues. Who used the cemetery and how did that change over time? What are the causes of death and how did they change over time? Where were people living both in Brooklyn, NYC and the nation and how did that change over time? How representative were the occupants of the cemetery of the changing demographics of Brooklyn, New York, and the nation? These are fundamental questions that can shed light both on the internal history of Green-wood as well as the broader history of New York and Brooklyn. I really don’t know of as complete a record of health and disease for New York outside of the vital statistics records of the cities themselves. In fact, I’m not sure that even these records are as “complete” or continuous as your day books. When I wrote my book on Brooklyn hospitals I depended on a very select sampling of data from a few hospital records and a few Census Bureau reports that were published occasionally. One particularly important source for me was the occasional summaries of Census materials that appeared. One extraordinary piece of work was Billings’ compilation of causes of death by census tract from the 1890 Census. But it is merely a snapshot of the deaths in the city for one particular period of time.<sup>38</sup> The records at the cemetery contain a continuous stream of data from the 1840s to the present from which can be extracted a tremendous amount of information. For example, a brief look at the mid nineteenth century listings indicate that consumption was a major cause of death while by the 1940s cancer had replaced it as a primary source. This in and of itself is not surprising but for once we have an incredible means of testing out some hypotheses about the changing nature of disease in the century and a half of the cemetery’s existence. In very brief and simplistic terms, many have hypothesized that the growing importance of cancer in the twentieth century is linked to the significant increase in longevity of Americans. Here we have an incredible source to test that hypothesis: with these records we could literally do age-specific death rates by cause and see whether specific age groups followed similar or different patterns of disease. Certainly many factors regarding this data set would have to be accounted for including the shifting social characteristics of populations that used the cemetery but I can think of no more complete and continuous data set than this. Similarly, death by gender, occupation, even neighborhood could provide a fascinating way of understanding the growing, changing, evolving ethnic and class make-up of the community and the corresponding nature of disease for specific groups. Was the industrializing city, with its attendant dangers and exposures transforming the health of the city? Were different groups at risk for differing conditions and diseases?

In short, there are untold possibilities for this data source for historical demographers, geographers, social and economic scholars interested in the impact of a changing society on health and diseases. It is a very exciting to participate in this exploration of the uses of Green-Wood’s records.

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<sup>38</sup> John Shaw Billings, Vital Statistics of New York City and Brooklyn covering the Six Years Ending May 31, 1890, (Washington:: GPO, 1894)

I apologize for the brevity of this report. Thank you for allowing me to participate.

David Rosner

*Gone But Not Forgotten: Digitizing the 177 Year-Old Legacy of New York City's Green-Wood Cemetery*

A planning grant funded by the National Endowment for the Humanities

Report prepared by Lacy Schutz, Executive Director, Shaker Museum | Mount Lebanon

Background

Green-Wood Cemetery is a tax-exempt, nonprofit corporation registered as a 501c13. The Historic Fund (HF) is a 501c3 established in 1999 as a subsidiary of Green-Wood Cemetery. The two entities have consolidated financial statements and the HF is treated as a department within the Green-Wood corporation rather than as a separate organization. There is no separate board of trustees and the Historic Fund does not have its own budget.

Staff

The employees of the HF are part-time consulting archivist Tony Cucchiara, full-time Manager of Historical Collections Stacy Locke, and a part-time Historian, Jeff Richman, whose salary is split between Green-Wood and the Historic Fund.

The Historic Fund is overseen by Lisa Alpert, Director of Development for Green-Wood Cemetery. She describes the Historic Fund as a way for the organization to grow into more of a cultural institution, as it becomes a less active site for interment. (As space grows more scarce, there will be less operating income from sales of plots.)

Recommendation:

- Hire a full-time archivist or records manager who is a strong leader and who has experience with database design and implementation to steer future projects and help the Historic Fund grow into a more independent entity.

Collections and collecting

There are three distinct collection areas.

- 1) The records.

This is a vast collection of paper materials made up almost entirely of active institutional records for Green-Wood Cemetery. The bulk of the data revolves around a) who is buried in the cemetery and b) who has legal ownership of plots. Additional records address maintenance of the site, architecture and maintenance of mausoleums and other structures, and landscape history. The majority of records are active and continue to grow as Green-Wood Cemetery continues to do business.

- 2) The historical collection

This collection contains ephemera, books, realia, and manuscripts relating to individuals interred at Green-Wood Cemetery, companies run or founded by individuals interred there, products invented or manufactured by individuals interred there, and / or historical events in which those interred were involved.

### 3) The fine art collection

This is a collection of paintings depicting individuals interred at Green-Wood Cemetery, paintings by artists interred there, and, to a much smaller degree, landscapes of Green-Wood.

The historical collection is overseen by the Historian, whose primary sources for expanding the collection are EBay and donations. The President of Green-Wood Cemetery selects the fine art with occasional assistance from a consultant. There is no oversight of purchases, except when a fine art purchase exceeds \$10,000, at which point the President must receive full Board approval. There is no collecting policy to govern what types of historical or fine art material the repository collects, or criteria by which to judge the intellectual or artistic value of additions to the collection. All purchases are made out of line items on the Green-Wood budget and are therefore owned by the Cemetery, not the Historic Fund.

Acquisitiveness has overrun judgment in many cases. On my visits to the repository, I observed many duplicate and similar objects within the historical collection, and objects that were purchased in poor condition. Areas in which the Historian has a personal interest (e.g. the Civil War) are over-represented, and there is scope creep beyond the Cemetery to Brooklyn and New York City history. The fine art collection consists of many hundreds of paintings, well exceeding the current physical capacity to store them. Paintings are literally stacked up in piles leaning against walls in hallways and stairwells. The artistic quality of many of the paintings is very poor and in some cases paintings have proven to be either forgeries or misattributed.

Because the fine art and historical collections have grown so rapidly without the aid of a collecting policy or committee oversight, it's difficult to identify what's of real value. The Historic Fund has created a strong collections management policy that includes formation of a collections committee, but that has not yet been implemented. It also has collecting guidelines, but these address administrative issues like legal title, ability to care for objects, and condition of items, not intellectual content or artistic value.

#### Recommendations:

- Establish a collections committee that evaluates and approves purchases and donations.
- Establish a collecting policy (in addition to the existing collections management policy) that defines the intellectual and mission-driven scope of the collection and collecting activities.
- Either transfer ownership of records and object collections to the Historic Fund, or create a strong memorandum of understanding between the two entities that specifically addresses stewardship and agreed upon use of the collections.



- Purchase objects at public auction from reputable auction houses rather than EBay.
- Establish collections criteria that give guidance on evaluating individual additions to the collection in terms of intellectual content and artistic quality, in addition to condition, relevance, and redundancy.
- Conduct a collections review and retroactively apply the policy and criteria to the existing collection, culling it to the objects of real value for telling the story of Green-Wood Cemetery.

#### Potential for digitization

The records contain vast amounts of interrelated data spread out over diverse records groups. Most of the records are active and in use on a regular basis by staff of Green-Wood Cemetery. The core of the data consists of the name of the person interred, the lot in which the person is interred, and information about ownership of lots and plots over time.

There are currently two proprietary databases that are used in the day-to-day work of running the business side of the Cemetery. Staff use the databases in conjunction with the paper records.

#### Recommendations:

- Do not send original materials out for photography.
- Instead, create one integrated database and invest in a database design that is able to integrate all of the multi-level, related information across various record sources.
- Enter the data from the primary sources into the database.
- Retire the primary resources to archival status and storage and conduct all new business and record-keeping electronically.
- Place the finding aids online.
- Identify sub-sections of the archival records, such as architectural drawings, for digitization and seek public funding for those discrete projects, making the digitized materials freely available on the Green-Wood Cemetery website, or a free section of an otherwise fee-based online genealogical research database.
- As the mission of the organization evolves and its educational and cultural roles become more defined, the organization can create discrete online exhibitions, digitizing select objects that support those roles.

#### Access and use

The primary research value of the bulk of the records is genealogical. While interesting, information about causes of death, for instance, is largely duplicated within New York City's death records. The correspondence files may contain useful information for those doing historical research on prominent individuals interred at Green-Wood, but the majority of the material is going to be of interest primarily to family and descendants. Architectural drawings of mausoleums and monuments, and records about the historic landscape, have broader interest.

The bulk of the records are also the proprietary business records of Green-Wood Cemetery, and some information, if made public, could violate privacy laws.

The collection has been extensively re-housed, and finding aids created for record groups, so the material is accessible to on-site visitors, though space for researchers is currently limited.

Recommendations:

- Seek legal advice on what information about individuals may be made public, and when.
- Seek Board buy-in on what is proprietary information and what can be made public.
- Conduct a return on investment analysis that looks at the cost of entering data into a database and making it available on a fee-basis to genealogists vs. partnering with Ancestry.com.

In conclusion

As the organization looks to transition from an active cemetery to a cultural and educational anchor in south Brooklyn, the mission should be clearly defined and a strategic plan created that supports the evolution from cemetery to cultural organization. Once the mission is defined, the strategic plan can address what collecting, access, and digitization activities will move Green-Wood Cemetery forward.

Elizabeth Rohn Jeffe

## Suggestions for NEH White Paper

I would like to offer the following observations and suggestions for consideration for the creation of the final white paper.

### **What are themes for research/potential avenues for research?**

#### *1. Green-Wood as a critical element in the study of the larger history of Brooklyn and New York City*

A great deal of promise lies in the in-depth study of the Cemetery as an example of, and contributor to, the growth of Brooklyn and New York. This story, which is conveyed in numerous materials in the collection, has several phases. One focus of this theme could be dubbed “Green-Wood before Green-Wood.” Recent studies in ecological and pre-urban history, such as that in the book **Manahatta** by Eric W. Sanderson, have endeavored to show what the landscape of New York looked like from the era of Native American settlement up until the present day. The land transfer records and narratives in the collections at Green-Wood make for a fascinating study in how what is today Green-Wood was once a collection of farms, many with the oldest names in New York history, such as the Wyckoffs and Schermerhorns. The purchase of these family agricultural units, bought to create the Cemetery, represent a major step forward in the development of Brooklyn’s history.

Another way to use the G-W archives to enhance our understanding of Brooklyn/New York City history is to study in depth the accounts of finding a safe and sanitary resting place for human remains that were being dug up in Manhattan as the City relentlessly underwent development in the 19<sup>th</sup> century. The 1839 narrative of David Bates Douglass bears this out with a description of how construction work in Manhattan caused the “disgusting spectacles” of human remains being dug up and “incidental and almost unnecessary exhumation and exposure of the dead.” This is an important point of reference because although the cemetery movement in the 19<sup>th</sup> century had an aesthetic basis in a desire to provide a peaceful and beautiful setting for burials, suitable for visitors to visit graves and enjoy the landscaped grounds, there was also a compelling practical and sanitary need for sufficient burial areas outside metropolitan areas. At the same time, other G-W archival materials note that not everyone wished to be buried in a rural cemetery. Hence, Green-Wood’s collections could enhance our understanding of

the factors underlying the sociological phenomenon of the creation of rural cemeteries, and who was buried there and why.

## *2. Green-Wood as a business concern*

While all of us are committed to the larger mission of Green-Wood as a cultural institution, especially given that eventually G-W will have no further burials and will become only a caretaker for its “permanent residents,” it might be instructive to use the many existing business records in the archives to document just how Green-Wood has functioned as a nonprofit entity for over 175 years. Granted, a cemetery is quite different from a typical business enterprise, but there is likely enough here to support an interesting analysis of just what it took to create the cemetery, run it, purchase additional acreage, engage local visionaries in its creation and management, deal with peripheral development of roads, related businesses, etc. Perhaps a business student, as opposed to a student in the humanities, would find this avenue of study to be of interest. (An example of something that struck me in the materials is the fact that until well into the 20<sup>th</sup> century, the offices of G-W were located in lower Manhattan, as shown in letterhead and correspondence with the Cemetery by lot holders and others.) So much focus on G-W’s history is on those who are buried there, its art and architecture, its status as an arboretum, etc., that perhaps the rich resources on the actual running of the Cemetery would benefit from a comprehensive analysis.

## *3. Green-Wood as it relates to the history of urban planning*

While a great deal of Brooklyn’s growth and some of the Cemetery’s development was not “planned,” although the latter is heavily regulated, many issues related to the cemetery’s history fall under the umbrella of urban planning. These include matters ranging from the later creation/extensions of bordering streets such as Fifth Avenue and issues of view lines, to aesthetic and landscaping guidelines and even infrastructure concerns such as drainage and hurricane recovery. Materials related to these issues are in the collections.

[I would note here that these and other topics could be listed as research possibilities on our website, as suggested by Thomas Kessner at our first team meeting.]

**What can we do to make these records known to the research and academic communities?**

Clearly, the input of the professional archivists will be essential in creating the systems that will be in place when the archives achieve their final organization in the new archival center. The digital finding aids and related data will enlist the interest of those visiting our site.

However, to reach those who are not initiating contact with us, it might be worth considering how we might enlist the interest of those in academic circles and the general public. Perhaps G-W professional staff who are accustomed to garnering press coverage for the Cemetery could devise a comprehensive plan to educate people as to what G-W possesses in its collections by publicizing our website, which will list our archival holdings. Ideally, a G-W archival speaker could visit nearby campuses and give presentations on Green-Wood and its collections.

These efforts could also help us define our audiences for our archival collections. Some of our materials might be suited only for academic researchers, and others might be suitable for the general public, along the lines of the Green-ealogy initiative. Determining this will help us move forward efficiently in the future.

### **How do we handle privacy issues?**

I would be in favor of allowing as much access to our holdings as is permitted by Federal standards, unless there is some compelling reason not to do so.

### **What larger Concepts Regarding Green-Wood's Future could be envisioned for Green-Wood in the future?**

*In the near future:*

1. It might be a useful exercise to initiate an oral history project for Green-Wood. This does not require a great deal of expense, and I am aware of other programs, such as that at Greenwich Library in Connecticut, where trained volunteers carried out a highly successful oral history project. This project would serve two objectives: first, it could involve people with relatives buried in the cemetery, or people who grew up nearby, or even people who live in the area today, with an opportunity to share their memories and experiences, engendering a connection between them and G-W, and second, it could enhance our information base and could help inform our efforts to be relevant moving forward.

2. Another near-term goal should be the integration of our collections and our research library, which contains such essential works as those of Cleaveland and Bates. These enlightening sources, many of them out-of-print, should be at-the-ready for anyone researching the history of Green-Wood. As we move forward with our Archives Center, we should keep in mind a way to make the 175 books in our research library readily available while at the same time keeping them safe from deterioration.

3. With regard to our Priority I materials, I would suggest that we should move ahead as quickly as possible to safeguard these materials. No doubt our archival specialists will weigh in on this in detail.

*Farther down the road:*

Perhaps we could envision ourselves as a center for Cemetery history, providing seminars for representatives from other similar institutions in order to share our experiences and knowledge with colleagues in the field. Preservationists, historians, and other groups have conferences like this and share a wealth of knowledge; why not Green-Wood? If we establish ourselves at the forefront of archival excellence among cemeteries—becoming the go-to-institution—we will have achieved yet a new level of excellence for ourselves as a historical and cultural leader.

*A final suggestion...*

The Green-Wood Board's Visitor Center Committee is now working with the museum planning and design firm of Gallagher & Associates. The completed NEH white paper and our thoughts leading up to its final iteration will be of invaluable help to the Committee's efforts. Perhaps a representative from Gallagher & Associates could sit in on our final meeting, if protocol permits.

Q: What potential projects, themes or areas of research can you envision for these records? What kind of information can be gleaned from these records? What are potential avenues of research? What trends or patterns in the data may be of interest?

A:

I examined a number of different documents and collections during my research at Green-Wood. The founding documents of the Cemetery and the Henry Pierrepont Papers provide a blow-by-blow of the legal history of the institution, and its interactions with both city and state officials and bodies of governance. These documents would provide new data and details for scholars looking to chronicle the legal history of cemeteries, and more broadly the rise of public-private institutions in nineteenth-century cities.

Expanding in the shadow of a much larger city across the river, Brooklyn was extremely conscious of its own civic infrastructure, and the establishment of Green-Wood would have met a real public need but also would have played a role in situating Brooklyn as an up-and-coming urban center in a national context. These documents reveal the challenges and victories faced by the cemetery in the city's earliest years. The documents also provide information about debates over land exchange and use, and justifications for cemeteries in the context of growing city and development of a municipal infrastructure. Upon its establishment, Green-Wood sat on land that bounded different towns and cities in Kings County – Flatbush and Brooklyn. The collection shows how the porous nature of urban boundaries in the nineteenth century created unique legal structures for civic leaders in the decades before the “super-city” of Greater New York was envisioned or realized.

As I am working a project at Brooklyn Historical Society about the history of public health in Brooklyn, I approached the Chronological Books looking to see what can be gleaned about that history from these collections. First of all, as an artifact of nineteenth-century record keeping, these books are remarkable – they are large account books in which the interred at Green-Wood are entered in the order in which they are buried. They span the earliest years of the cemetery through 1937, when Green-Wood moved to an alphabetically-organized card system. The Chronological Books offer a vast, possibly unprecedented amount of data about every person interred at Green-Wood, which, using a simple database, could be leveraged in countless ways. The Books track date of internment, name, nativity (largely by state or country), the most recent residence (usually city; if in Brooklyn, by street address and/or neighborhood), Y/M/D age, marital status, the cause of death (in nineteenth-century books, indicated as “disease” not cause of death”), the lot number, and the undertaker.

I was struck by the potential for mapping and charting disease based on so many of these categories of information. Correlations between place of birth, late neighborhood, and cause of death could allow for new analysis on the nature of disease and its prevalence in particular neighborhoods. Data about infant and child mortality could be gleaned from the Chronological Books. Scholars could also learn new information on the neighborhoods from which the majority of Green-Wood's interred hailed and draw inferences about race, class, and ethnic backgrounds and the likelihood of being buried in Green-Wood. By tracking this information over time, scholars can learn whether and how particular diseases plagued those buried at Green-Wood during particular eras, and compare that data with broader information about mortality collected by Boards of Health in Brooklyn and New York.

From my initial forays into the Chronological Books, I was able to make some observations about disease prevalence in Brooklyn in the mid- and late nineteenth century. In looking at the first Chronological Book, which recorded the first burial and ran through 1850, I noted the high number of deaths from consumption (which was called many different things at the time) as well as high numbers of maternal deaths (called at the time “childbed” deaths). Cholera and smallpox were also reliable seasonal killers.

I was able to trace, for example, the 1849 Cholera outbreak month by month. In May 1849, Green-Wood recorded three burials of cholera victims. By June, the number had jumped to 55. July and August both had around 250 cholera-related burials; by September, the number had dropped again to 41.

I took these numbers simply by counting entries. But a database amassing all of the related data (nativity, age, place of residence, etc.) would allow me to learn so much more – including what neighborhoods cholera outbreaks took place in, the nativity of those who died, the ages of death, whether there were particular undertakers who dealt with cholera (and those that didn’t), whether particular dates around which deaths were clustered reveals information about how the disease spread, and so much more. Additionally, many deaths attributed to “bilious diarrhea,” “dysentery,” and other gastrointestinal diseases might also have been instances of cholera; related data might allow us to correlate those cases and adjust death numbers.

Comparisons with later time periods also reveal fruitful information on the changing nature of public health and disease. For example, the major causes of death in Volume 30, which tracks burials between 1883 and 1885, are very different than those in Volume 1. Numbers of deaths from cholera and smallpox have shrunk, and growing numbers of tuberculosis victims are recorded (here the cause of death is most often recorded as phthisis). Yet other causes of death like stillbirth and “childbed” persist.

A database correlating data could allow for data visualization including:

- Mapping places of death and places of birth
- Mapping residences of all Green-Wood burials
- Mapping diseases to residences/ neighborhoods
- Mapping birthplaces/nativity to residences/neighborhoods
- Charting average ages of death at different times
- Charting average causes of death at different times
- Charting and mapping locations of plots over time to determine how the cemetery grew and expanded
- Comparing data on ages, causes of death, neighborhoods of residence to broader data about these criteria in New York City to determine the particularities of Green-Wood internees. For example, what if fewer people buried in Green-Wood died of phthisis than in city average. Why?

Another project might be to consider the labor behind this kind of record keeping at Green-Wood and other similar institutions. The Chronological books are handwritten, and it’s clear in the books that I examined that the same person is keeping these recordings. What was the labor hierarchy at Green-Wood in the nineteenth century? Whose job was it to record these burials? How did that work change over time? What role does Green-Wood and institutions like it play in the origins of archival practices? Clues may lie in the books themselves, as well as in related institutional records.

I also spent some time examining Green-Wood’s Burial Orders, which are organized by lot number. Each folder includes extensive information which may include multiple individual internments. To me, the



value of these lies in revealing the workings of the cemetery on an everyday level – especially as a customer-service oriented model trying to serve the needs of the lot owner. It also records significant detail about the visual maintenance of the cemetery, which speaks to its hybrid role as a places of burial, commemoration, and public spectacle. The Burial Orders also reveal ways that people have decorated and commemorated their loved ones, and combined with data from the Chronological Books, could again reveal patterns of cultural commemoration correlated to place of birth, neighborhood, place of death, and more. This is all in addition to the obvious usefulness of those engaging in biography and genealogical work.

In addition to the above records, I also looked through some nineteenth century histories of Green-Wood, including the following:

- Nehemiah Cleveland, *Green-Wood Cemetery: A History of the Institution from 1838 to 1864*. New York: Anderson & Archer, 1866.
- *Exposition of the Plan and Objects of the Green-Wood Cemetery, An Incorporated Trust Chartered by the Legislature of the State of New York*. New York: Narine & Co., 1839.

These provide helpful context and situate the history of Green-Wood in the context of institution-building in the growing city of Brooklyn, the legal apparatus and challenges of the cemetery in early years, and the national cemetery movement. I would imagine many are available and searchable online via sites like Google books. That said, they were helpful to have onsite while I examined the cemetery records.

Q: What will Green-Wood need to do to make these records known to the research and academic communities?

A: Below are some suggestions:

#### Web resources with smart SEO strategies:

Today, most researchers find resources using Google and other search engines. Green-Wood should make resources like collection descriptions, finding aids, research guides, subject guides and more readily accessible on the web. It should be clear that Green-Wood has archives; that's not something that I think most researchers will realize.

Make sure these resources are accessible on widely used databases like worldcat.org. Consider partnering with the Digital Public Library of America, as BHS has.

Design and populate Green-Wood's website in such a way that it is search engine optimized using extensive and relevant keywords.

#### Professional Organizations

Engage in regular, consistent outreach to professional organizations like the American Historical Association, Organization of American Historians, Southern Historical Association, Urban History Association, etc. Outreach could include press releases, offers to give tours, tutorials, etc. They may post about it on their websites, on their blogs, social media, etc. Reaching out once is better than nothing, but I'd encourage regular contact with them.

#### Existing users, advocates, and researchers

Draw on existing networks of scholars and researchers who know the worth of your collections and have networks of colleagues to whom they could disseminate the news about your resources. Make sure you provide them with something simple and tangible – perhaps a nicely designed half-sheet that they can post on social media about or distribute via email. Too much information (for example, bunches of finding aids or pages-long collections descriptions) will cause overload and are too onerous for initial outreach.

#### Related archives

Reach out to other repositories that have related material – including biographical manuscript papers of those interned at Green-Wood, papers related to urban history, cemeteries, public health, parks and landscape history, etc. Repositories may include: Brooklyn Historical Society, New-York Historical Society, the Municipal Archives, the Library and Archives at New York Academy of Medicine, Columbia University's Rare Book and Manuscript Library, NYU's many archives, the Mutter Museum in Philadelphia, and more.

Ask them to help disseminate news about your resources, but also to include references to them in related finding aids or subject guides. Offer to do the same for them.

Q: How could Green-Wood improve the way we arrange and present our materials so that they may best be used by researchers? Is there anything we can do to improve our intellectual and environmental controls over the materials? Consider issues of privacy and public access; what sort of Privacy Policy would you recommend?

A:

By and large I think this is a question for the archivists. I would imagine there are legal questions to consider about when records can be made public. I also imagine there are internal questions about the continuing relationship you might have with the family of a person interned here at Green-Wood that I'm unfamiliar with.

Q: One of our goals for collection and the archives is to bring people to Green-Wood to see the original documents and items. How can we achieve that, while still making them widely accessible digitally? If everything is available online, have we eliminated any reason for people to visit?

There is certainly professional literature on this issue. Again, I think this is an issue that archivists have been thinking deeply about for quite a while. From the perspective of a historian, most scholars, if they are able, will want to research in person. It is rare that an archives can put all of their collections online; and scholars also are able to glean insights from the physicality and arrangement of archival collections. To that end, I would emphasize the unique benefits of exploring collections in person vs. online in online finding aids.

Q: What options does Green-Wood have in regards to how and to what extent we share our records with the public? What gradations exist between full online free public access of all our records and restricted onsite access?

A:

If you want to be seen as an archives on par with other research institutions, you should not put material behind a pay wall. If you want to offer research services at a fee, that's a different story. But if

people want to be able to access resources to further public or scholarly knowledge on various subjects, they should not have to pay for the opportunity to do so.

Q: If Green-Wood makes records publicly available online, would you suggest the use of a watermark? Considering the benefits and issues associated with use of a watermark, how might we make our records most accessible, but limit reproduction, etc.?

A:

Again, I think this is a question for professional archivists more so than historians. I guess a question I would have is, unless there are copyright restrictions (in which case, you probably shouldn't put the collections online), why wouldn't you want your materials circulated widely? And why would a watermark stop someone from, say, tweeting or sharing an image or posting it on a blog? And wouldn't that just further drive traffic to your website?